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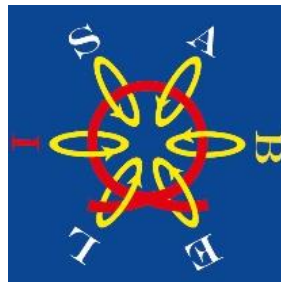
Due date: December 31, 2020
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Author(s): Eva Bezgousko
Reviewers: All partners
Status: Submitted

ISABEL

– Improving the sustainability of the European Magnetic Field Laboratory

D1.1 KICK OFF MEETING REPORT

20 November 2020



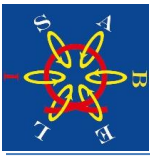
Present: 36 participants (see the list of names below)

Meeting duration: 4 hours

Date and time: Wednesday, November 20, 2020 @ 13:30

Location: Video conference (Zoom)

Version	Modifications	Date	Authors
1.0	First draft	24/11/2020	Eva Bezgousko
2.0	Final version	11/12/2020	Eva Bezgousko

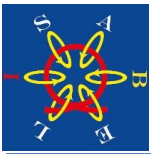


13:30 Welcome by the coordinator Geert RIKKEN (5 minutes)

Presentation of every participant, their activities in the project or the WP they will lead or be active in:

- Charles Simon (CNRS), leader of WP6
- Oliver Portugall (CNRS), leader of WP9
- Eva Bezgousko (CNRS), ISABEL project Manager
- Marine Bertrand, (CNRS) Project Engineer
- Joachim Wosnitza, (HZDR) leader of WP4
- Thomas Hermannsdorfer, (HZDR) leader of WP5
- Carmine Senatore, (UNIGE), WP2 & WP9 (tasks 2)
- Pavel Javorsky (CUNI), active in WP 2 & 5
- Jenny Matthews, (UNOTT) administrative representative
- Urmas Nagel (NICPB)
- Amalia Patane (UNOTT), leader of WP2
- Adam Babinski, (WARSAW), active in WP2 & 5
- Florence Lecouturier (CNRS), leader of WP3
- Ziad Melhem, (OI), active in WP3 & WP9
- Giuseppe Maruccio (SALENTO), representing the Italian network, active in WP2
- Hermann Suderow, (UAM), active in WP2 & 4
- Sylvain Roux, (CEA) support the WP9 with P. Fazilleau
- Dennis Wijnants (METEL), partner
- Martin van Breukelen, (RU), leader of WP 8
- Peter Christianen (RU) leader of WP7
- Michael Gehring (BN)
- Ana Balcerzak (WARSAW), support Babinksi as administrative representative
- Rene Martins, Project Officer* ¹
- Pierre Vedrine (CEA), representative at the Council, active in WP2 & 7
- Jan Prokleska (CUNI)
- Raivo Stern (NICPB) active in WP2 & 5
- Florian Dutech (B-Max/I-Cube Research), involved in WP3
- Irène (UAM) support the implementation with H.Suderow
- Philippe Fazilleau (CEA), task 4 WP9
- Suza Frank (OXF) financial management
- Bart de Vries (Vronk), involved in WP9
- Throsten Hauler (UOXF), support Amalia Coldea in management
- Milada Mensikova, management support of CUNI
- Philip Revilak (BN)
- Amalia Coldea, (OXF), involved in WP2 & 5
- Martina Razova, (CUNI)

¹ a change of PO should come by March-April.



13:55 presentation EU project officer René MARTINS (20 minutes)

1) LEGAL AND FINANCIAL OBLIGATIONS

- 3 report periods (M18, M36, M48)
- External monitors hired to evaluate the project
- Recommendation: each beneficiary appoints an account administrator that may act as the LEAR's backup.

> Reviews happen within the last month of reporting period with two types of drafts

- Technical
- Exploitation of results
+ a summary of project resources consumption and deviations (budget, average salary)

- Reports: should relate what has been done (objectives, progress, achievements, comparison with plan)
Pay attention: if there is a delay on the implementation of a deliverable, if there would be an impact, it would be necessary to detail this delay on the periodic report.

- **Paying back to the EC including:**

- Recovery orders (audits, terminations, change of COO or pending pre-financing...)
- Sanctions

- **Termination of the GA**

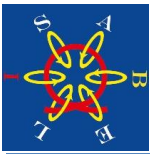
- Coordinator may request termination of a beneficiary's participation and beneficiary may request its termination
- Suspension is possible to re-arrange the contract
BUT the EC can also terminate a contract in case of:
- Breach or irregularity in a contract's obligation
- Contravening of ethical rules

- **Amendments**

- Requested on the participant portal, at any moment before the final payment
- This request has to come from the coordinator, acting on the behalf of the consortium
- Amendment needed if :
 - Re-allocation of Annex 1 tasks
 - Transfer between forms of funding (actual costs, unit costs...)
 - New subcontracts

2) BUSINESS PLAN & EXPLOITATION

- Results must be used and disseminated
- Results with industrial or commercial application must be protected
- Any dissemination must indicate the EC financial assistance
- Prior notice of dissemination must be given to other participants



3) COMMUNICATING THE PROJECT

- The beneficiaries must promote the action and its results:
 - Define a comprehensive communication plan
 - Include WP for communication or in other WP
 - Address the public policy perspective
 - Keep communication measures proportionate to the scale of action
 - Choose types of communication activities

For further information on the communication and dissemination : [Improving communication and dissemination activities beyond the scientific community \(europa.eu\)](https://ec.europa.eu/info/communication-dissemination/communication-dissemination-activities-beyond-scientific-community_en)

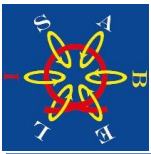
Presentation of Horizon Europe and its structure, tackling specific problems, with opportunities in pillar 1 and 2.

Questions / Remarks:

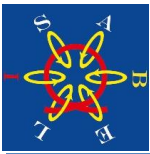
- No specific change for the moment as far as the UK position in the EU research funding is concerned, some clarifications should come by the 31st of December.
- A link to the implication of UK in the Green Deal Call : https://www.ukro.ac.uk/Pages/UKRO-Announcements-Page.aspx?ListID=%7B782f4f00-0bfa-49e9-9317-ef927fb1d90b%7D&ItemID=3754&utm_source=email&utm_medium=email&utm_campaign=eo_email_attendees

14:15 short presentation of each partner (18 x 2 minutes)

- **CNRS**, Europe's largest research organization of 1000 laboratories covering various disciplines, which operates on the French ministry of Research with national large research facilities (ESRF, SOLEIL, VIRGO...)
- **HZDR** , 1200 staff member, part of the EMFL and member of Helmholtz Association of German Research Centres and offers access to high magnetic field facilities
- **RU** , high magnetic field laboratory located on the RU , part of EMFL. Fields up to 38 Tesla are available, a 45 Tesla hybrid magnet is under development.
- **UNOT**, The University of Nottingham has campuses in the UK and abroad (Malaysia and China). It has about 45,500 students and 7,000 staff. The research in the School of Physics and Astronomy is divided into six broad areas. There is a long tradition of research in magnetic field, including magnetic resonance imaging. Nottingham coordinates the UK Membership of the EMFL, which is funded by the UKRI
- **OXF**, one of the top universities in science and has long tradition in high magnetic fields. The university has developed an Oxford centre for applied superconductivity with a 21T magnet. Represents UK regional partners of the project ISABEL.



- **WARSAW**, faculty of physics has 200 staff members, facilities of high magnetic fields around the faculty, coordinates the polish membership in EMFL and is representative of nine polish institutions interested in developing the high magnetic field research in the Council. Main interest in semi-conductors but also in magnetism.
- **UNIGE**, staff involved in the WP2 working in superconductivity both on high and low temperatures superconductors. Production of new materials and involvement in collaborations in high magnetic fields development.
- **UAM**, work with numerous colleagues in Spain, Isabel Guillamon got a regional prize. Numerous 17T magnets available nationwide and especially at UAM + large density of scanning probe microscopy groups.
- **CUNI**, Material growth and measurement laboratory supported by Ministry of Education, Youth and Sports within the program of Czech Research Infrastructures. Partner institution: Institute of Physics of the Czech Academy of Sciences.
- **NICPB**, interdisciplinary Research Institute, which carries out basic and applied research in materials science, genetic engineering and biotechnology, environmental technology, in the field of particle physics and informatics.
- **CEA**, priority to defense, security, nuclear and renewable energy, technological research and fundamental research in physics and life sciences. Development of superconducting magnets and CEA is also developing superconducting magnet for physics detectors
- **OXINST**, priority to material and characterization, service & healthcare, research and discovery. Design support tools in quantum technology, new materials, and device development in physical sciences. Products can be cryogenic tools, ultra-low temperature tools, superconducting magnets, instrumentation. A new class of Compact LTS outserts for HF applications of > 20 Tesla
- **B-Max/I-Cube research**, producer for special systems with simulation tools, implementation of systems in production line, involved in luxury package industries notably.
- **UNISALENTO**, university with a clean room facility, spintronics laboratories, and work also on materials such as semi-conductors and oxides.
- **EMFL**, organization founded in 2015, with 3 main members (HLD Dresden, LNCMI, HMFL Nijmegen) which offer their facilities to the scientific community in high magnetic fields (continuous and pulsed). One of the main goals is to reinforce the four existing high magnetic field laboratories as one world-leading infrastructure.
- **BN**, works in the area of magnet, nuclear technologies, service and montage, structural health monitoring, PINE (INP measurement system). Masters the



- superconducting magnet technology with design functional studies, engineering, manufacturing, operation and maintenance to disassembly.
- **METEL**, focused on the delivery of high-performance metals, this supplier and servicer collaborates with the Chinese group Tipro International and has also a collaboration with European partners in high magnetic fields.
 - **VONK, (formerly Ampulz)** leader in the field of customized power conversion solutions. The aim is to create solutions for energy transition and to custom solutions based on standard building blocks.

14:45 presentation by ISABEL project manager (EB, 30 minutes)

- **THE ACTION**

General information on the project :

- Duration : 48 months
- Consortium : CNRS (coordinator) and 18 beneficiaries, CNRS Innovation as a linked third party
- Budget : 4 937 406, 25€
- Acronym : ISABEL (Improving the Sustainability of the European Magnetic Field Laboratory)

- **REPORTING**

3 Reports (with progress and financial reports) to submit. Dates of submission:

- **30/06/2022**
- **31/12/2023,**
- **31/12/2024**

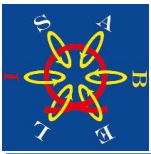
The final report (**31/12/2024**) has to summarize executed tasks and results, present a final consolidated Financial Statements and present a certificate on the financial statements.

- **BUDGET & PAYMENTS**

- Second pre-financing payment: **30/07/2022 (with progress report and financial statement)**
- Payment of the balance > **31/03/2025**
- All request for payment, financial statements and payments must be drafted in euros
- Audits by the EC that will start up to two years after the payment of the balance

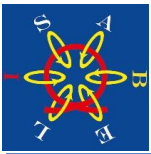
- **FINANCIAL MANAGEMENT – Avoiding the most common errors**

- Eligible costs to be identifiable and verifiable with documents, incurring during and for the project



- The costs always have to be clearly linked to the project and present proper documentation
- Personnel costs to be declared on time sheets and approved, with the acronym ISABEL on the sheet.
- Travels always have to be planned by the project, declared on time sheets, and a proper documentation as a proof (invitation, agenda...)
- Equipment is linked to the duration of the project with depreciation
- Costs of consumables: Award the contract to **the tender offering the best value for money or, as appropriate, to the tender offering the lowest price (+ keep all the supporting documents)**
- Subcontracting has to be approved by EC, not cover to the core tasks of the action, and has to be justified as necessary.
- Eligible indirect costs declared on the basis of 25% flat-rate. VAT has to be excluded as it is ineligible.

- **RIGHTS & OBLIGATIONS**
 - Beneficiaries **inform the coordinator** immediately of **any events or circumstances** that are likely to affect or delay the implementation of the action and **any change in its legal, financial, technical, organizational or ownership situation** and **any change in its name, address or legal representative** (idem for their affiliated entities).
Beneficiaries must submit in due time **the reports & financial statements**
 - The coordinator must also inform of any change listed above. Is **responsible for providing all the necessary documents required for checks and audits and must ensure that all appropriate payments are made.**
 - Any communication or publication must indicate that the action has received **funding** from the Union and **display the EU emblem.**
 - Presentation of web pages of ISABEL (Consortium, Project, Intranet...)
 - Beneficiaries **may transfer ownership of results.** A beneficiary that intends to transfer ownership of results must give at least **45 days advance notice** (or less if agreed in writing) to the other. Beneficiaries have the right to use the results for reproduction, communication, translation, distribution, adaptation... Information about the **copyright owner** must be inserted by the EU in cases where the result is divulged by the EU.
 - Transnational access: The units must be actually used or produced in the period of the project; the units must be necessary for implementing the action or produced by it, and the number of units must be identifiable and verifiable, in particular supported by **records and documentation.**



15:15 presentation of the consultative bodies and creation of ISABEL Council (Coordinator, 15 minutes)

Four EMFL consultative bodies:

- User Committee
- Selection Committee Board of Directors (CB + Chair Persons of IC)
- Innovation Committee (ILO, representatives of the technical and scientific staff at the facilities + technology transfer officers of CNRS, HZDR and RU + representatives of the industrial partners)

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Other bodies:

- **Coordination Board (Coordinator+Project Manager +BoD + ILO + Selection Committee + User Committee)**
 - **Council**, representing all the partners (Annex 1 p.14)
- Question about the pre-financing payment: should be transferred by the week 23/11 and the official document will be sent to the partner as a proof.

15:30: 15 minutes pause

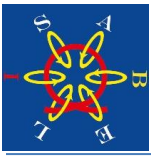
15:45 presentation of each WP by WP leader (9 x 10 minutes)

- **Geert Rikken: WP1**

This work package implies the operational, technical and financial aspects of the project, collective decision-making and conflict-resolution, the communication within the consortium and with the EC services, and all other administrative and managerial aspects. WP1 will also define the implementation of the project's activities beyond its end in the context of the EMFL and consider any changes to the formal structure of the EMFL AISBL.

Deliverables:

- Kick-off meeting report (M2)
- Council meetings reports (M13, M25, M37, M48)
- EMFL governance analysis and outlook report M36
- WP leader meeting reports every 9 months
- Reports to the Commission (M18, M36, M48)



- **Amalia Patane: WP2**

This work package deals with community building and membership enlargement. Promote excellent science and technologies in high magnetic fields.

3 main tasks:

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- Development of regional partner networks (Identify users who would benefit from access, promote opportunities at the EMFL, provide information and training users, foster collaboration around national and international infrastructure)
- User community meetings (Annual EMFL user meetings in terms of technology and expertise)
- Training early-career researchers: 2 schools for early-career researchers + mid-term and long-term secondments (2 calls per year)
- Link to WP5 about regional access to facility, and the expansion of the community of users

- **Florence Lecouturier - Dupouy: WP3**

Bridging the gap between EMFL and industry through better service for industrial users and active transfer of EMFL technologies to industry. Linked to WP5 for access improvement, and WP8 for communication towards industrial users.

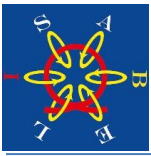
4 tasks:

- Raising staff awareness on IPR, economic and societal issues
- Making industries/SMEs aware of frontier science and the unique technical development from the EMFL sites
- Stimulating collaboration with industries/SMEs
- Attracting industrial users to the EMFL facilities

At M3 : WP3/MP5 meeting and WP3 /WP8 meeting

Every 2 months : Innovation Committee meetings

- Remark on the ILO, further information on the [European Network of ILOs](#)
- Remark on the categories of industrial partners: suppliers/users/beneficiary



- **Jochen Wosnitza: WP4**

- Develop and define EMFL data policy
- Research data inventory, define the types of data collected (First inventory M12, update at M24)
- Data analysis software, define which tools could be used by user community, thanks to an inventory of available software tools
- Research data management, define how data will be stored and which will be available, (Data management plan at M6, M24, M48)
- Make reference to existing standards (OPEN AIRE and EOSC)
- Find balance between open access and exploitation by patenting or transfer to industry
 - Remark: considering every aspect of FAIR (Findable Accessible Interoperable Reusable) when implementing protocols

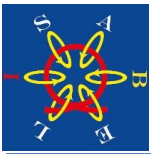
- **Thomas Herrmannsdörfer: WP5**

New access procedures that will make EMFL more attractive, even after the success of ~ 1500 user proposals in 5 years.

6 tasks:

- EMFL user survey: definition of new scheme of access modes with announcement of start of novel access modes by M1 and 13.
- Fast-track access with fast decision (2 weeks) & fast experiments (1 month)
- Long term access with planned among of 500 magnet hours and pulses
- Industrial access: with confidentiality of the results, development of harmonized contract template forms and standard tariffs. These accesses will be decided within 2 weeks by the CB.
- Dual access to regional partners facilities and to EMFL. The planned dual access will be done in 26 weeks at regional partners facilities with 200 magnet hours and pulses (UNOT, UOXF, UAM, UWAR, UCHA, NICPB, UGE)
- First-time access: experiment proposal preparation, reinforced on-site support > planned amount of 200 magnet hours and pulses.

EMFL and partners will develop, announce, test and report new access schemes, and will further adapt these access schemes challenged by new boundary conditions (e.g pandemic)



- **Charles Simon: WP6**

Collaboration with other research infrastructures, notably with already existing collaborations with mobile pulse fields, Berlin Neutron, FELIX, 25T hybrid magnet...

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The goal is to identify other possible RIs to collaborate with.

3 tasks:

- Elaboration of scientific cases (workshops, interaction with WP9)
- Access procedures to be defined by M36
- Elaboration of a roadmap for development of high fields in RIs (public report at M48)

Method:

- Regular meetings of the WP6 months to report to D1.4 to D1.8
- Distribution of the WP6.1 task
- Discussing with other facilities for access (6.2 with WP5)
- Writing the roadmap in parallel

- **Peter Christianen: WP7**

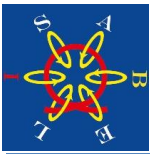
Development of a global high field collaboration

The idea is to push the boundaries towards better magnet installations, requiring a global effort among the major organizations interested in the development of such new technologies.

The goal is to represent Europe in the high field research in the global-scale, and to stimulate worldwide activities.

3 tasks:

- Creation of a global network (forum of high field facilities) – identify potential partners with candidates such as industry, ISABEL partners, other large-scale infrastructures before finally organizing the structure of the network.
- Global roadmap for future high-fields activities. Define a strategic roadmap for the next generation, and provide concrete options for the industrial exploitation. It will go through workshops/international conferences.
 - global collaboration strategy paper (M48)
- Blueprint of an international governance structure. Development of a common approach to advice and influence national roadmaps and funding agencies. Define optimal governance structure, decision-making and planning processes.



- **Martin van Breukelen: WP8**

Objectives of the communication and dissemination activities are:

- to inform the stakeholders of the ISABEL results in a timely and targeted fashion
- to raise the awareness of EMFL among the scientific and industrial communities, the general public and policy makers,
- enable maximal scientific and socio-economic impact of the EMFL results

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It is worth considering an '**outreach**' program encompassing all EMFL partners

Question > How to communicate about the Super-EMFL? This will be presented on the EMFL website in a sub-page such as ISABEL.

4 tasks:

- Communication with the general public (*Develop the ISABEL online presence, Direct interaction with the general public, Communication supports*)
- Communication with EMFL users (*User Meetings, Website, EMFLNews, Other meetings, Open access support*)
- Internal communication (*Management meetings, Communicators club, Staff coherence*)
- Communication with industry (*Industrial club, Skills map, Exhibitions, Advertisement/articles in industry-related press, EMFLnews*)

- **Oliver Portugall: WP9**

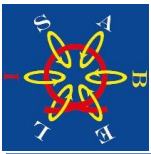
Magnet technology evolution

At 48: roadmap for magnet development with a few considerations before-hand:

- What do users want?
- Technical feasible?
- Engineering tools and resources
- Operation and sustainability?
- Technical implementation plan?
- Likely implementation level on which scales?

5 tasks:

- Inventory of needs and potential: Survey becomes principal tools to define needs, and requires a careful preparation. Users need guidelines regarding technical and financial feasibility.
- Inventory and characterization materials for high-field magnets
- Energy procurement and recycling for DC high fields facilities



- Design center for high fields magnets
- Roadmap definition

Interactions with WP3,6,7 and 8

Inventory of available design tool needs to be established and available prior to the meeting (before M8) Page | 13

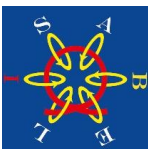
- Remark: Covid 19 may prevent user meetings because round tables by video conference would be difficult to organize. Therefore, during M1-2, it will be necessary to adapt activities due to the context.
- Still have to define when the user survey will be done between M8-M12 (ideally on M10) and how to motivate the users (combine it with another survey?) or to explain that how it is useful for the users to do it. Another possibility proposed is to do the survey as interviews and calls.
- The type of survey is to be defined: maybe make users go to high tech platforms they are used to.

17:15 discussion & questions (30 minutes)

- Question about the current situation and the possibility to travel : Hoping it will be possible by February or March.
- In June 2021, the planned User Meeting in Dresden will require to travel.

17 :35 Closure

* Paris time



ANNEX 1 : Council Members of ISABEL

1	Centre National de la Recherche Scientifique	Charles SIMON
2	Helmholtz-Zentrum Dresden-Rossendorf	Jochen WOSNITZA
3	Radboud University	Peter CHRISTIANEN
4	University of Nottingham	Amalia PATANE
5	University of Oxford	Amalia COLDEA
6	University of Warsaw	Adam BABINSKI
7	University of Geneva	Carmine SENATORE
8	Universidad Autonoma de Madrid	Isabel GUILLAMON
9	Charles University	Jan PROKLESKA
10	National Institute of Chemical Physics and Biophysics	Raivo STERN
11	Commissariat à l'Energie Atomique et aux Energies Alternatives	Pierre VEDRINE
12	Oxford Instruments Nanotechnology Tools Limited	Ziad MELHEM
13	I-Cube Research	Florian DUTECH
14	University of Salento	Giuseppe MARUCCIO
15	European Magnetic Field Laboratory AISBL	Martin Van BREUKELEN
16	Bilfinger Noell GmbH	Michael GEHRING
17	Metel B.V.	Denis WIJNANTS
18	Ampulz B.V.	Bart de VRIES