



BrightnESS

**Building a Research Infrastructure and Synergies for Highest
Scientific Impact on ESS**

H2020-INFRADEV-1-2015-1

Grant Agreement Number: 676548

brightness

Final Version

**Deliverable Report:
D1.3 Agenda and minutes of 1st annual General Assembly meeting**



1 Project Deliverable Information Sheet

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3 List of General Assembly Representatives present at the meeting¹

Organisation	Name
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Teknologisk Institut (DTI)	Nikolai Zangenberg
Institut Max von Laue -Paul Langevin (ILL)	Charles Dewurst (mandated)
Forschungszentrum Jülich (FZJ)	Tania Claudio Weber (mandated)
Magyar Tudományos Akadémia Wigner Fizikai Kutatóközpont (BNC Wigner)	János Füzi
Elettra – Sincrotrone Trieste SCPA	Roberto Pugliese
Istituto Nazionale di Fisica Nucleare (INFN)	Santo Gammino
Technische Universiteit Delft (TUD)	Rik Linssen
Consortio par la Construcción, Equipamiento y Explotación de la Sede Española de la Fuente Europea de Neutrones por Espalación (ESS Bilbao)	José Luis Martínez
Lunds Universitet (LU)	Hanno Perrey
Mittuniversitetet (MiUN)	Christer Frojdh
Paul Scherrer Institut (PSI)	Knud Thomsen

¹ Signed participation list is available in Annex 8-1. Only official (or mandated) GA Representatives took part in the discussions and voting.



Science and Technologies Facilities Council (STFC)	Justin Greenhalgh
European Organisation for Nuclear Research (CERN)	Mar Capeans Garido (mandated)
Danmarks Tekniske Universitet (DTU)	-
Copenhagen University	Brian Vinter (mandated)
Commissariat à l'énergie atomique et aux énergies alternatives	-

4 List of Abbreviations

- AFC – Administrative and Finance Committee
- BRR – Budapest Research Reactor
- CNS – Cold Neutron Source
- DMSC – Data Management Software Centre
- DTU – Technical University of Denmark
- ELI – Extreme Light Infrastructure
- ERIC – European Research Infrastructure Consortium
- ESFRI – European Strategy Forum on Research Infrastructures
- ESS – European Spallation Source
- EVM - Earn Value Management
- GA - General Assembly
- GSO – Group of Senior Officials
- IFE – Institute for Energy Technology, Norway
- IKC – In Kind Contribution
- ILO – Industrial Liaison Officer
- LU – Lund University
- PCP – Pre-Commercial Procurement
- PPI – Pre-competitive Procurement of Innovation
- PSI – Paul Scherrer Institute
- SNS – Spallation Neutron Source, Oak Ridge
- STFC – Science and Technology Facilities Council
- TRL – Technology Readiness Level
- VAT – Value Added Tax
- WP – Work Package



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5 Executive Summary of the BrightnESS 1st General Assembly Meeting

The first BrightnESS General Assembly (GA) meeting was held on 7th October 2016 in Lund, Sweden. As the Assembly is responsible for monitoring the project implementation and determining the strategy and direction of the project, the meeting represented an important opportunity for taking stock of the technical progress made during the first year of BrightnESS, discussing risks and problems encountered, checking progress versus cost expenditure and aligning on the activities for the next 12 months.

In total, 16 partner institutes² were represented at the meeting. The day before the official GA-meeting, the Representatives were invited to visit the ESS construction site visit outside Lund, followed by an informal networking dinner. At the GA meeting the participants were welcomed by Allen Weeks, the ESS Head of Communications, External Relations and IKC Management, who started the meeting with an overview of the ESS construction status. In the following session, Roy Pennings and Raquel Costa, the Project Coordinator and the Project Manager respectively, provided an overall update of the technical and financial project status of BrightnESS (WP1) as well as information on the upcoming reporting process to the European Commission.

The meeting continued with a presentation of the progress and status of Work Packages (WP) by each respective WP leader:

- Roy Pennings & Raquel Costa gave a detailed overview of WP1 – “BrightnESS project management & overall project progress its first year”
- Carlo Bocchetta presented WP2 – “Strengthening the In-kind contribution and coordination”;
- Allen Weeks discussed WP3 – “Organisational Innovation”;
- Richard Hall-Wilton gave a detailed overview of WP4 – “Innovation of Key Neutronic Technologies: Detectors and Moderators”;
- Tobias Richter presented WP5 – “Real-Time Management of ESS Data”;
- Ute Gunsenheimer and Juliette Forneris discussed progress in WP6 – “Collaboration, Communication and Dissemination”.

Each presentation was followed by a Q&A to clarify questions from the audience and a more general discussion on progress and next steps.

The conclusion of the GA Assembly Representatives on behalf of their institutes was that:

- the project is on track;

² In total 27 participants attended the meeting, comprised of formal GA-members and several so-called Field Coordinators and Financial Officers from some of the institutes who provided additional supporting information to the GA about specific activities from their institute related to the implementation of the work package(s) their institute is involved in. The non-GA-members did not have a vote during the meeting. The Consortium partner CEA (Commissariat à l'énergie atomique et aux énergies alternatives) was not able to attend.



- deliverables and milestones were produced on time and are of good quality;
- cost expenditure per partner and for the project as a whole, is under control despite first year underspend and that mitigation actions per WP are in place and credible;
- the project is well managed by ESS;
- no strategic decisions to modify the BrightnESS project are necessary.

6 General Assembly Meeting Agenda

6th October 2016

Optional activities:

16.00 – 17.00	Visit to the ESS construction site, Lund
19.00	Dinner at Mat & Destillat Restaurant, Lund

7th October 2016

Time	Subject	Presenter(s)
09.45 - 10.00	Welcome & agenda of the meeting	Allen Weeks
10.00 – 10.30	Overall update of the Project Status in relation to ESS construction	Roy Pennings/ Raquel Costa
10.30 - 11.15	WP2: Strengthening the In-kind Contribution coordination - main activities + more detailed examples/cases - main achievements for ESS and for partners - past risks & solutions, identified risks and approaches - next steps and deliverables	Carlo Bocchetta
11.15 – 12.00	WP3: Organisational innovation - Idem	Allen Weeks
12.00 - 13.00	<i>Lunch</i>	
13.00 - 13.45	WP4: Innovation of key neutronic technologies: Detectors and Moderators - Idem	Richard Hall- Wilton
13.45 - 14.30	WP5: Real time management of ESS data - Idem	Tobias Richter
14.30 - 14.45	<i>Coffee break</i>	
14.45 - 15.30	WP6: Collaboration, Communication and Dissemination - Idem	Ute Gunsenheimer/ Juliette Forneris
15.30 – 15.45	Views from the In-Kind Review Committee (IKRC) and the Scientific Advisory Committee (SAC)	Representative(s)
15.45 – 16.15	Identified risks and improvements from the BrightnESS perspective	Roy Pennings / Allen Weeks
16.15	GA meeting conclusions & wrap-up	Roy Pennings

7 General Assembly Meeting Minutes

The programme of the General Assembly meeting started on October 6th with a visit to the ESS construction site just outside Lund, followed by an informal networking dinner at the Mat & Destillat Restaurant in Lund.



Image 1 – GA Representatives visit to the construction site, 06.10.2016



Image 2 – GA Representatives and other attendees at ESS, 07.10.2016

7.1 Welcome and Introduction to ESS – [slides here](#)

Allen Weeks, ESS - Head of ESS Communications, External Relations, IKC Management

At the start of the meeting, Roy Pennings welcomed the General Assembly Representatives and introduced Allen Weeks, who delivered a presentation about the current state of the ESS project programme. He began by showing a photo of the construction site and indicated that preparations for technical installations are underway. A crane is being set-up in the dogleg area to prepare for the November installation of the first in-kind ESS Bilbao's Beam Dump shielding solution. Overhead cranes are also being installed in the Gallery Building Cold Box and Loading Hall in advance of installations in those areas. Preparations to cast the Monolith base slab are nearly complete. Construction of the facade of the Cryo-Compressor Building is also progressing, with work ongoing to establish piping and duct connections between the Cryo-Transfer Line and the Accelerator and Target areas a. Backfill along the Accelerator Tunnel has moved to a more advanced stage with the reinforcement of the slope between the tunnel and the Gallery Building retaining wall. Allen confirmed that during 2015, there were 5.500 visitors to the ESS construction site.

Weeks also informed the GA Representatives that the new Director General, John Womersley, will officially start his work on November 1st 2016. Womersley will lead further development of the ESS Project using his extensive knowledge of research infrastructures and his experience as current Chief Executive of the Science and Technology Facilities Council (STFC). Womersley is also the outgoing Chair of the European Strategy Forum on Research Infrastructures (ESFRI) he has played a leading role in particle physics both in Europe and the United States.



Allen Weeks then updated the audience on the new ESS Project Manager, John Haines, whose role is to assist the Director General and work with Directors and Project Managers for Sub-Projects to deliver the ESS Project Programme according to its baseline approved scope, schedule and cost. The near-term focus is on revising baseline plans before the end of the year.

The ESS construction site is 25% complete and ESS has grown very much in the last years. It currently employs 375 people from 48 different countries. Weeks highlighted that every partner country is involved in building the 16 In-Kind Contributions. All ESS divisions are working in parallel and there is a plan for installation in place. The accelerator installation manager was identified as one of the priorities of project management.

For the ESS campus offices and labs, two work place design scenarios have been developed for the main building. They will provide a basis for the Executive Management Team to discuss and decide on the next phase of this part of the development.

At the end of the presentation, GA Representative José Luis Martínez from ESS Bilbao pointed out that there are some delays in the construction delivery, for example due to lack of coordination of in kind delivery. He also wanted to know if BrightnESS could help in any way to prevent or minimize the delay. His second question was related to the possibility of giving 5-year contracts to scientists. Allen Weeks said that he understood the need to solve both issues. It was not directly related to BrightnESS, but at ESS options are being investigated.

7.2 Work Package 1: Overall update of the Project Status in relation to ESS construction

**BrightnESS Coordination Team: Roy Pennings, BrightnESS Coordinator – [slides here](#)
and Raquel Costa, BrightnESS Project Manager – [slides here](#)**

Roy Pennings, as the BrightnESS Coordinator, started his presentation by recapping the role of the GA Representatives in this meeting and their responsibilities. The GA members (e.g. the institutes) have appointed the GA Representatives to act on their behalf as the highest-level decision-makers of the Consortium and, in case of significant changes to the project's implementation, they decide on strategic changes to the project's structure and processes (following EC pre-approval). In such case, the Coordinator (on behalf of the project's Steering Board; STB) will submit a proposal to the GA Representatives for their final decision and approval. Pennings stated that the first year of operation of BrightnESS had not led the STB to consider or propose strategic changes to the content or structure of the BrightnESS project. The



following presentations on the content of BrightnESS would show achievements thus far, but also encountered issues and identified risks. For each risk the WP-leader giving the presentation, would describe appropriate mitigation measures.

Pennings said he hoped that, based on the presentations, the GA Representatives would agree that a strategic change to the project is not required at this time.

Overall status of progress & deliverables achieved

A good indicator of the project's technical progress is the status of submitted and approved deliverables by the European Commission. Pennings provided an overview that showed that of the thirteen deliverables for year 1 of BrightnESS, only one is one month late. Six have been approved, three were submitted awaiting the European Commission's approval, another one was under review of the Steering Board and two are deferred to a later date as part of an Amendment to the Grant Agreement. The project's achieved milestones also confirm that the project is on target. This view was echoed by the General Assembly Representatives.

Pennings continued by stating that, from his point of view, there are no changes expected to the Consortium composition, that there had not been any disagreements within the Consortium and that assigned roles and responsibilities within the work packages were being executed according to plan and to satisfaction by the individual partner organisations. This was continuously being monitored and established through the regular Partner Visits. Pennings had visited six Consortium institutes thus far. Apart from maintaining a good and informal working relationship, the main topics during these visits were usually related to cost eligibility, participation in other work packages and overall technical progress. To facilitate communication and interaction between the partner further, Work Package 1 has made use of the project Vademecum (to explain financial and administrative processes and procedures), the bi-weekly newsletter, an FAQ section on the project's Wiki webpage and the online quarterly Cost Monitoring Tool.

Administrative/financial issues for second year of BrightnESS

Roy Pennings then outlined several important administrative and financial issues that will require attention during the second year of BrightnESS. These are:

- an Amendment will include several operational changes to the Grant Agreement (for example: transfer of funds categories and partners, change in some deliverable and milestone dates, etc.). The Amendment can only be made once the administrative change in the Commission's ECAS system on the ESS legal status (from Limited company status to ERIC status) has been completed. This will take place as soon as the Certificate of Liquidation of "ESS AB" is available;
- partner institute cost re-allocations, in order to tackle the project's current underspend, in line with mitigation actions proposed by the WP-Leaders;
- the first financial and technical report on BrightnESS is due in March/April 2017. Preparations for the report, as well as for the formal Mid-Term Review in Q1 2017, will start soon.



He finished his presentation by stressing that BrightnESS should not be considered a stand-alone project, but that its main purpose is to support the construction of the ESS. The grant received from the European Commission provides the ESS and its partners with the means to optimize (and to a certain degree: develop) in key technical areas, technology transfer and in-kind coordination.

Q&A

Following the presentation, there were several questions from the audience. Some of the questions were related to procedures regarding budget transfer between work packages. Pennings informed the Representatives that in principle only changes to the subcontracting category require an Amendment. However, partner institutes should always inform their respective work package leader about any planned change to other cost categories. In case of doubt, they would refer to the Coordinator for follow-up and confirmation by the European Commission.

Tania Claudio-Weber, mandated Representative from the Forschungszentrum Jülich, suggested that the BrightnESS newsletter could also be changed from a bi-weekly publication to a monthly edition, as it is sometimes difficult to find the information ESS requires for inclusion in the newsletter. Pennings confirmed that the newsletter should serve the partners' requirements. We would discuss this point in the next STB, which will take place at the end of the month.

The issue of the transition of ESS to an ERIC was also brought up and Representative José Luis Martínez (ESS Bilbao) compared the situation with a typical 'chicken-and-egg' conundrum which might possibly also have implication for cost reporting by the partner institutes. Pennings showed himself optimistic and said he expected that the Certificate of Liquidation of "ESS AB" (the limited company) would become available by the end of the year. He stressed that the current situation does not represent any financial risk for BrightnESS and that this issue is continuously monitored and discussed with the European Commission who are very supportive.

Overall financial status after one year

Roy then handed over to Raquel Costa, who proceeded with an explanation of the project's overall financial status (Note: discussions with individual partner institutes about their costs are done on a one-on-one basis by the Coordination Team). She began her presentation by introducing the online Cost Monitoring Tool, which provides cost information per partner and per work package for the different budget categories. This Tool was introduced to the partner institutes during the Kick-Off meeting and is described in the Vademecum. The Tool allows the Coordination Team to keep track of the project's expenditure on a quarterly basis and verify that it is running on schedule and within budget. The financial information is filled in by the individual partner organisations and the figures are then analysed by Costa. From the available figures, she estimates the cost expenditure – which is based on flat calculation – for the corresponding time period. The report is subsequently sent to the STB (e.g. the Work Package Leaders) who can take



appropriate action in case of under/overspend by partners. Costa mentioned that as part of improvement efforts, she was considering possibilities to make the Tool more responsive to the partners' needs, by allowing retro-active calculations (e.g. reflecting in the Tool also changes made by the partners to costs incurred in previous quarter) and a link between the Tool and the planned budget to reflect lower and higher expenditure profiles during the year. She confirmed that all partner institutes have been very collaborative in providing their quarterly financial information and also report on any deviations from the work plan that could require attention and action from the Coordination Team. So far there have been no major concerns. The figures shown in the slides presented by Costa confirmed that during the first year of operations, the BrightnESS project consortium had spent 51% of its estimated resources. The Coordination Team's view was that this is a normal situation during the starting year in H2020 projects. Costa was also still in the process of checking and confirming with individual partners whether all project related activities had indeed been booked on appropriate BrightnESS cost codes.

She concluded by briefly describing a meeting held on the 27th and 28th June 2016, in which financial officers of the BrightnESS Consortium project and the closely related (in terms of Consortium and science-base) SINE2020 Consortium met in Lund to exchange best practices and tools on how to best financially implement and manage both research projects. The second day of the meeting had been filled with presentations by the two European Commission auditors who provided first-hand information about the upcoming H2020 audit process.

7.3 Work Package 2: Strengthening the In-kind Contribution coordination – [slides here](#)

Carlo Bocchetta, Work Package 2 Leader

Carlo Bocchetta started by giving an overview of what WP2, 'Strengthening In-kind Contribution Coordination' is intended to achieve. Its aims are to maximise the possibility for ESS and In-Kind Partners to contribute to the construction phase through 'In-Kind Contributions' (IKC) according to the ESS IKC Process and to minimise and mitigate the risks associated with those contributions. The WP has four Tasks, eight participants and an overall budget of 4.247 million euros.

Status of progress & deliverables

Bocchetta confirmed that WP2 had achieved the European Commission's acceptance of two deliverables. A further one had just been submitted and one was still in progress with a revised due date in November. With regard to the WPs milestones, only the agenda and minutes of the first year's IKC conference are pending because the conference had been rescheduled to November 2016.



Bocchetta highlighted the main activities of the Work Package³, which can be summarised as follows:

- Task 2.1: Deliverable ‘Risk assessment and mitigation plan’ has been approved. Field Coordinators have been identified and trained to support this Task.
- Task 2.2: The full CRM-software system is being built in stages as: (1) formal deliverable in September 2016, (2) technical two updates (in 2017) and 3) a final review (in 2018), for a practical and effective user experience. The system will manage contacts for effective communication and monitoring of IKCs, allow various level of access and permissions to users, maintain a status of IKCs through documents, plans, progress and risks, permit the integrated management of reports and their generation, establish EVM indicators and general KPI's, import data from CiviCRM, import data from project planning code Primavera P6, have integration with INDICO software and manage attached documents or links to external document management tools. The software will be moved from Consortium partner Elettra servers to ESS servers³ early in 2017 and will permit access via various hardware platforms.
- Task 2.3: The deliverable 2.2 has been approved. Knowledge will be exchanged and shared across an open communication platform, consisting of: (1) ESS Project and IKC related documents that are relatively static, (2) News on the status of the project and IKC and (3) Forums for sharing questions and answers based on common internet style fora focused on specific ESS IKC issues. The first BrightnESS Best Practice Workshop is planned for 14-15 November 2016 in Bilbao, Spain. ESS-Bilbao, Elettra and ESS are the organisers of the event, which will focus on “Engineering aspects of large-scale In- Kind projects”. Four Sessions (22 speakers) are foreseen. Presentations and conclusions will be put on the BrightnESS website.
- Task 2.4: The regional hubs are established and all have Field Coordinators that assist in the timely and qualitative delivery of the IKC for their region. The Field Coordinators (up to 19 people active with 6 leaders) support all three phases of the IKC process, take part in bi-weekly meetings between ESS and the Regional Hubs and participate in the organization and facilitation of Task 2.3. Their work is important for ESS to ensure that during the design, development or instrument transfer phases at and between the local partners no delays occur to ESS overall construction due to misunderstandings or errors in planning. The Field Coordinators thus support the technical ESS Project Team leaders at local level in identifying any new risks and maintaining project control of IKC.

Bocchetta continued by saying that overall, the all major objectives for this WP are being achieved and WP 2 is providing necessary additional resources to both ESS and partners for many In-Kind actions. Still, there is a need to continue strengthening the communication of BrightnESS goals at the with institutes within a hub. He confirmed that there had been an underspend in WP2 in the first year, but analysis showed that

³ Work Package Tasks are listed in Annex 8-2. Detailed Task descriptions can be found here: <https://brightness.esss.se/about/work-packages>.



this was mainly due to delays in hiring personnel and partner expended eligible costs which had not yet been attributed to BrightnESS in the financial figures. Additional part-time resources will be brought in to support the Field Coordinators.

Q&A

Bocchetta’s presentation was followed by a Q&A session, which centred around risks and mitigation actions for In-Kind contributions. Bocchetta indicated that actions that were being put in place through BrightnESS WP2 are directly relevant to ESS. To emphasize this aspect, Bocchetta pointed out that the ESS In-Kind Review Committee has the mandate to comment on WP2. After all: an important aim for BrightnESS WP2 is to bring to ESS management’s attention the risks related to IKC, but the technical mitigation actions themselves are part of the ESS project and not covered by BrightnESS.

7.4 Work Package 3: Organisational Innovation – [slides here](#)

Allen Weeks, Work Package 3 Leader

Allen Weeks presented Work Package 3, “Organisational Innovation”. This WP supports capacity building in the three main areas: (1) ERIC implementation, (2) Capacity Building in Technology Transfer and (3) Capacity Building of ESS Partners in Public Procurement of Innovation.

Status of progress & deliverables

Weeks started by saying that WP3 is late with the submission of deliverable 3.1, due to ESS internal legal and financial reviewing requirements. Although the deliverable is expected to be submitted soon to the European Commission, it will appear with a new due-date in the forthcoming Amendment. The EC project officer has been made aware of this situation. The two WP3 milestones, on the other hand, have been successfully submitted.

Task 3.1. aims to identify specific risks and opportunity categories, develop a plan for prioritising and addressing those issues and carry out the plan. Specifically, this Task is about finding ways forward on topics like the Value-Added Tax (VAT) treatment, procurement rules and staff mobility and taxation.

Weeks pointed out that the European Commission confirmed the establishment of the European Spallation Source as an ERIC formally on the 31st of August 2015. The successful establishment of European Spallation Source ERIC was celebrated at a ceremony in Lund on 8 September, where the EC’s Director-General for Research and Innovation, Robert-Jan Smits, presented a commemorative ERIC Plate to ESS. As part of Task 3.1, Weeks had invited Representatives of the ESS and Representatives of national ministries, tax authorities and partner research institutes of the 15 ESS Founding Members and Observer



Countries, to a workshop in June 2015 in Malmö. The aim was to examine the impact of different national VAT ideas and approaches on In-Kind Contributions to ESS. Weeks confirmed that direct purchases of goods and services are VAT-exempt for ESS. However, in as far as ESS in-kind partners are concerned, this status and recognition is not consistent across the Member Countries. Weeks told the GA Representatives that the report with the conclusions and potential solutions to the VAT issue (meaning: practical ways forward also for ESS to handle VAT), is close to completion and will be available shortly for the ESS Administrative and Finance Committee (AFC) to inspect.

A second activity within Task 3.1 was the Extreme Light Infrastructure (ELI) Beamlines stakeholder meeting in June 2016. The meeting acted as a Transfer of Knowledge opportunity to explain to ELI the recent ESS experience towards becoming an ERIC. Information on tax regulations, mobility of international staff, use of structural funds and IKC was of particular interest to the ELI delegation. The ESS Activity Report, the first as an ERIC, was another achievement in this Task 3.2 and it has been distributed to the key stakeholders.

Weeks then went on to present Task 3.2. Here he told the audience that at the start of the BrightnESS project an Innovation Officer had been recruited who had started on the development of the ESS Innovation Policy and ESS Innovation Process. However, already in April 2016 he left the organization. The recruitment of a new person is expected to be complete by the end of October. In the meantime, the Innovation Policy had still been written and was now being discussed at ESS Management level.

As part of Task 3.2, consortium partner DTU had also performed an analysis on the ways that other Big Science facilities, universities and research centres interpret and implement innovation. Weeks listed them as: (1) Innovation in Procurement, (2) Innovation in In-Kind Contributions and Partners, (3) the Use of instruments in research projects or commercial use, (4) Staff Exchange and (5) Operations. For the purpose of ESS, all 5 have different requirements in order to function efficiently. Weeks then drew attention to the fact that a mapping performed in WP3 of the ESS innovation ecosystem (which includes incubators, private and public funding, private companies and support networks), showed that Greater Copenhagen area has the largest research and development activity as percentage of GDP across the Nordic countries.

Task 3.2 also comprises an innovation training programme for ESS scientists, to make them better aware of innovation opportunities as part of their work as well as their role during innovation activities that involve ESS as a research facility. This training programme is currently being developed by DTU.

The participants in Task 3.3 had been active on building capacity towards identifying a future joint Public Procurement of Innovation. Already three out of six workshops/training sessions with partner organisations had taken place with another two lined up for the end of 2016. Also, an internal training seminar had taken place to explain and promote Public Procurement of Innovation to two ESS departments: Neutron Scattering Systems and Supply, Procurement and Logistics.



For the second half of next year, the intention is to identify and prepare one Pre-competitive procurement action with at least one partner organisation.

Weeks concluded his presentation by showing that overall expenditure of WP3 stood at 56% after one year. This underspend was related to personnel cost category (delays in hiring) and actions had been set in motion to compensate for the underspend during the next two years.

Q&A

Next, the audience was invited to ask questions. These mainly related to the VAT exemption issue, as this specific point represents an unsolved issue and risk for many partners. Weeks explained that ESS is putting great effort into solving the VAT issue, but this requires continued discussions with each Member Country and decision-making at Member State level. The report that was being produced, however, is expected to be of great help to partners, he said.

7.5 Work Package 4: Innovation of Key Neutronic Technologies: Detectors and Moderators

– [slides here](#)

Richard Hall-Wilton, Work Package 4 Leader

The next presentation was by Richard Hall-Wilton, Head of Detector Group at ESS and leader of technical work package 4. Hall-Wilton started by reminding the audience of the key objective of WP4, which is the technological evolution of neutron detectors in terms of resolution, intensity and dimensions. WP4 aims to turn novel developments from Technological Readiness Level (TRL) 3-5 into TRL 8-9 as part of ESS' construction phase. The disruptive innovation created by WP4 in terms of development and integration of neutron detectors and the moderator test beam line, is directly and indirectly relevant to nine of the ESS' future Instruments. Hall-Wilton underlined that the WP fundamentally relies on its partner institutes to develop the technologies through in-kind and collaborative tasks. Their close and continued participation is considered key to assuring a smooth start for ESS scientific output.

Technical progress within the WP

Hall-Wilton then gave a detailed description of the status within each WP4 Task. Task 4.1. addresses the resolution challenge. The work in the Task involves the integration of ultra spatial resolution (1-100 micron) detectors into ESS. Research within the first year of BrightnESS had confirmed that for the position resolution of the detector it is not necessary to know the full waveform of the strip signal. The timestamp and the maximum amplitude, which is information that the digital readout chip VMM3 will provide, allow



reaching a position resolution with a sigma higher than 250 μm . The efficiency of a GEM detector with natural Gd will be more than 11%.

Task 4.2 focuses on the intensity frontier. Here the aim is to realise detectors that can perform with strong rates of neutrons. The issues surrounding the supply and demand of Helium-3 are not the only factors driving ESS to develop boron detectors. Boron-10, which is a solid, allows for a level of flexibility in the R&D process that is lost when using a gas-based detector like Helium-3. The optimisations made possible by separating the detector medium from the readout mechanism are essential to improving the neutron counting rate by a factor of 300. This has been confirmed in tests to improve the measure of the rate capability of the MultiBlade detector, using the high flux “White beam” available at BNC-Wigner in Budapest. Signals from the detector were discriminated and counted by a scaler. The measure was repeated with different intensities of the beam. As attenuator, different slides of Plexiglas were interposed between in between the two collimators. Data was plotted as function of the mm of Plexiglas used to attenuate the beam. The detector recorded a rate counting up to 360 Hz/mm² without showing any sign of saturation. Further tests will be performed later in the year, including a scientific demonstration on reflectometry instruments.

Hall-Wilton then explained the status in the development of large area detectors, which is Task 4.3. The Multi-Grid detector must meet large-area detectors requirements, for example related to chopper spectrometers. Neutrons impinging on the detector pass through multiple layers of boron, where on each layer the detection probability depends on the thickness of the layer and neutron wavelength. Task 4.3 has developed software which enables optimization of the thicknesses of layers for any given distribution of wavelengths of the incoming neutrons. The optimisation can be done for a fixed wavelength or arbitrary distribution. It is also possible to optimise the thickness of each individual layer as well as the total number of the layers. This is particularly important for achieving the best possible detection efficiency in bispectral instruments, where a very large range of neutron wavelength is expected.

On a more experimental front, the Multi-Grid detector, designated MG.24, has been built at ESS and was tested in beam at IFE, Norway. The primary goal of the measurements was to commission the newly designed components, readout electronics and data acquisition that are to be used in the Multi-Grid test at the SNS in Oak Ridge later this year. The measurements were successful, showing that the Multi-Grid is up to the task.

Detector realization is the focus of Task 4.4. Hall-Wilton showed the audience the efforts being undertaken to construct the infrastructure necessary for measuring absolute detection efficiencies. LU is presently capable of measuring the fast-neutron backgrounds capabilities of detector prototypes for any of the ESS instruments. Future plans include the further development of the ‘aquarium’ - a purpose-built experimental setup designed for ‘tagging’ fast neutrons - to allow for the tagging of thermal neutrons via active moderators and state-of-the-art digitising electronics.



Task 4.5 on Moderator Testing and Beamline Development is done at BNC Wigner, Hungary. In June 2016, the modelling and experimental verification of the new moderator concept had taken place. The goal of the exercise was to set up a Monte Carlo simulation Tool for calculations of neutronics features of the current cold neutron source (CNS) at the Budapest Research Reactor (BRR) and the experimental verification of source brightness parameters by measuring neutron yield in a “white beam” from the CNS at BNC, in order to design a new moderator configuration. A provisional set up of direct beam measurement was prepared by using simple components, to be able to perform time-of-flight data collection to get an intensity-wavelength dependence of the CNS at various cooling conditions. The experimental arrangement was set up at 8 m from the CNS, just behind the heavy shutter of this beamline. A simple diaphragm – collimation – chopper – detector configuration was used. The cold source was cooled down at various conditions.

Status of deliverables

According to Hall-Wilton, all activities in WP4 are on track and there is some hiring still ongoing. He acknowledged that even though the work had already been completed, the report for deliverable 4.1 (Integration plan for readout) still needed to be written and submitted to the EC.

In terms of publications, WP4 can boast that during the first year of BrightnESS it has 6 published articles, created 1 open source software package, completed 5 Monte Carlo simulations and participated in 12 conferences in which BrightnESS was mentioned. The publications are available on OpenAire.

Similar to the other WPs, said Hall-Wilton, WP4 had been underspending in its first year. Also here, the reason is a delay in hiring new staff, and relatively high numbers of parental leave. He had discussed this with individual project partners and the new schedule indicated that expected committed costs for years 2 and 3 of the project are in line with the allocated schedule and budget.

Q&A

Richard Hall-Wilton then answered several questions from the GA Representatives. The first question concerned the increase in TRL levels and how committed the detectors are without a TRL in place. Hall Wilton explained that the availability of Helium-3 for non-US based research continues to decrease and the remaining global supply is coming from less stable source countries, the need to find alternatives to the standard neutron detection techniques is becoming more urgent. GA Representatives were also interested in knowing how accurate the presented forecast of the Helium-3 crisis is. Hall Wilton stated that according to the US predictions, it will be available only until 2022/2023 from various sources. Production it is still decreasing and will likely only be accessible in future for strategic purposes.



7.6 Work Package 5: Real-Time Management of ESS Data – [slides here](#)

Tobias Richter, Work Package 5 Leader

Tobias Richter, Head of the Data Management Group at ESS, is leader of WP5. He began his presentation by restating that the objective of the WP is to maximise the scientific output of the ESS by enabling live (real time) processing of the data taken on ESS instruments. The supporting software infrastructure must be capable of handling significant live data streams, store and retrieve the data in an easily retrievable manner and – of course - facilitate data reduction and data analysis.

Technical progress & deliverables

Richter explained that ESS and Copenhagen University are working together Neutron Event Processing (Task 5.1). This activity focuses on creating a standard neutron event data stream for different detector types. This Task supports novel detector types, as it is the case for WP4. As the detectors will emit raw time stamped information, tools are needed for refinement of the data. The initial task was to gather and analyse existing test data and establish specifications for the way data will be presented in the future. The outcomes of this Task will be disseminated at a joint WP4 and WP5 meeting in November 2016. The first deliverable related to this Task is due in May 2017.

Task 5.2, Fast Sample Environments, will create a standard method for streaming meta-data for fast applied fields, as there is a substantial amount of data and no key solution available that includes accurate timing. This is an ongoing joint task with Paul Scherrer Institute (PSI) recently started according to the project plan, which is progressing well.

In Task 5.3, Data Aggregation, ESS, together with PSI and Elettra, are working on software to make neutron event data and sample meta-data available. Following a detailed investigation of possible solutions, the team decided to use Apache Kafka as the underlying technology for aggregation and streaming, and Google FlatBuffers as the serialisation library. Richter showed in his presentation that they were now following an Agile development approach, using early software tests and delivery to re-evaluate requirements and progressing in many iterations. Task 5.3 was also progressing according to plan, said Richter, with virtual meetings between the partners held every two weeks.

Richter then proceeded by saying that software modules to generate simulated data streams for integration and performance evaluations are ready to be put into the testing and deployment infrastructure. This infrastructure consists of a build server and with virtual machines for deploying and running integration tests, as well as a physical lab space with three servers to be installed at the ESS Instrument Integration



Project laboratory in Lund. There, software from the Data Management group can be tested and integrated with real hardware and software from other ESS groups.

The coming development cycles within WP5 are intended as validation (and where needed: correction/modification) of the technology choices that have been made as well as system design and architecture. The fact that Apache Kafka is capable of handling large data volumes in other non-ESS projects is an indication that it can also satisfy WP5 requirements. Results from the tests and next development steps software are documented in ESS JIRA, Confluence and on Bitbucket.

Richter also drew attention NOBUGS conference in the October 2016 at which BrightnESS will be presented, and three important internal WP5 meetings: (1) a joint meeting with WP4 and WP5, (2) a meeting regarding readout electronics and output and (3) a meeting on integrated design review of all WP5 Tasks is planned for February 2017.

Any financial underspend that had occurred during the first year of WP5 was – similar to the other WPs – mainly due to delays in hiring the right staff. Richter showed the audience that costs are ramping-up mostly as planned.

A brief Q&A session followed Richter’s presentation.

7.7 Work Package 6: Collaboration, communication and dissemination

Ute Gunsenheimer, co-Work Package 6 Leader (Tasks 6.1 - 6.3) – [slides here](#)

Juliette Forneris, co-Work Package 6 Leader (Task 6.4) – [slides here](#)

Ute Gunsenheimer from ESS is co-WP6 leader, together with Ms Juliette Forneris from Consortium Partner DTI. The key objective of this WP is to strengthen community building between members of the ESS supply chain and external stakeholders to increase the interest of potential future academic and industrial users in using ESS as a research facility. The activities in the WP are sub-divided into four Tasks: Outreach, Enlargement, ILO and Project Communication.

Technical progress within the WP

According to Gunsenheimer, the participants in Task 6.1 partners worked hard to gain the trust of future users from science and industry, and to understand the role of key actors in the innovation ecosystem that ESS will foster. To this end, the BrightnESS team in this Work Package designed and carried out several



activities that led to a better understanding of their needs. The target groups for the activities were: (1) Scientific and academic users; (2) Industrial users; (3) Actors in innovation ecosystems.

Gunsenheimer subsequently described the activities and their results in more detail:

- European survey of scientific and academic users;
 - Inventory of current and potential future users of ESS from science and academia using a survey of existing neutron research infrastructures in Europe. The development of the survey questionnaire was a collaborative effort of BrightnESS partners and relevant national research. In March 2016, the final version of the electronic questionnaire was distributed to neutron sources across Europe.
 - The survey led to a report showing that the European landscape of neutron sources consists of 15 facilities, of which 13 are nuclear reactors and 2 are spallation sources. These neutron sources have a combined user community of 5,230 users, offering a total of 212 instruments (193 for external users) which are available for 2,699 operational days per year. The facilities jointly generate 19,204 beam days per year.
 - The results in the report are intended to provide to the scientific community a detailed and up-to-date overview of the technical capacity of the available research facilities, the composition of the user community and the usage of instruments across scientific disciplines.

- Mapping of the innovation ecosystem of ESS;
 - Actors in the innovation ecosystem of ESS were assessed through a mapping exercise supported by a thorough desk research, a benchmarking analysis and competitiveness assessment of regions similar to the one where ESS is based. Furthermore, several qualitative interviews took place with innovation experts and technology transfer officers in selected regions.
 - Identification of key actors and assessment of the potential of the innovation ecosystem surrounding the physical location of the ESS. Research showed that the Greater Copenhagen area has the largest research and development activity as percentage of GDP across the Nordic countries.
 - The resulting report is a comparison of scientific capacity of the region where ESS is based and scientific capacity in other regions in Europe. It identifies key actors in the innovation ecosystem of ESS and recommends what actions and mechanisms adopted by research facilities elsewhere could be successfully replicated for the benefit of ESS, its region and Europe.

- Regional focus groups and one-on-one interviews with industrial users;



- The needs and wishes of future potential industry users of ESS were assessed through focus groups and one-on-one interviews carried out by BrightnESS partner institutes in six different regional ESS-hubs in Europe (north-West, Central, Iberia, Gallia, South-East and Nordic-Baltic). The hubs were chosen to maximize the geographical impact of engagement and outreach activities conducted within the framework of the project.
- The results of the focus group sessions and interviews will be presented in 2017 in a consolidated report summarising the main findings from each hub. The report will provide a qualitative analysis of the potential industrial user community in Europe and also includes detailed hub-specific sections.
- Needs of industrial users have been found to be mainly related to the level of communication dedicated to industry. Industry appears to perceive large research infrastructures primarily as a 'tool for optimisation' of existing products rather than for the development of new products. Access policies, technical support and infrastructure and training were also identified as needs for the industrial users.

Gunsenheimer went on to say in the first year of BrightnESS many communication activities were carried out in the six Regional Hubs. Examples included: meetings of neutron scattering societies, physics schools, industrial fairs and conferences. BNC Wigner had also conducted a survey with 56 students from Eötvös Loránd University and Budapest University of Technology and Economics to establish the level of awareness and interest in ESS and its future user programme.

The work in Task 6.2 focussed on finding new Member countries for ESS. The strategy for that is to:

1. turn Observer countries to Member countries;
2. bring on-board new MoU countries;
3. find partners in countries outside of the European Research Area.

The following activities took place:

- Latvia: meeting on Latvian IKC (December 2015) and Partner Day in Riga (June 2016)
- Spain: Meeting of the Spanish Neutron Scattering Association (June 2016)
- Turkey: Partner & Industry Day (October 2015)
- Portugal: Partner & Industry Day (November 2015) and OesteCIM visit (May 2016)
- Belgium: SCK-CEN visit (March 2016) and ESS-MYRRHA-Oskarshamn symposium (May 2016)
- The Netherlands: Visit of Dutch Ambassadors to Denmark and Sweden (May 2016)

In Task 6.3, the goal is to expand the ESS Industrial Liaison Officers (ILOs) Network into a trans-national innovation-mediating entity. Each ESS Member country has the right to appoint an ILO to represent the Member's national industry and the traditional ILO-role is to distribute ESS call-for-tenders to relevant



national companies. Over the past year, two meetings were organised in Lund (September 2015 and March 2015) which were attended by Representatives from the first fifteen partner countries as well as from Turkey and Portugal.

Overall, WP6 organised 9 BrightnESS events with 150 participants attending in meetings 6 different countries. Additional events, such as the French Partner Day (180 participants), the Data Management Software Centre Opening (90 participants), the visit of Italian companies to ESS and the Group of Senior Officials (GSO) meeting on global research infrastructures, were also part of Task 6.3 efforts in support of creating stronger ESS membership base.

Outreach activities

Gunsenheimer then presented some figures showing that there is also a strong interest from the general public in ESS: 278 groups visited the ESS construction site last year. In order to cope with these numbers, a new on-site visitor space for visits and meetings had to be created. The new centre now allows internal and external visitors to experience how ESS is taking physical shape. The furnishing and the running of the visitor centre is paid for through BrightnESS WP6 as part of its outreach responsibilities. This aspect had not been included in the original BrightnESS proposal, but has since been accepted by the European Commission as eligible cost. The two visitor rooms are called: BrightnESS and Brilliance.

Gunsenheimer also highlighted BrightnESS synergies with other networks. For example: BrightnESS supports invited by the Nordic Neutron Science Programme networks to promote knowledge-sharing in the field of neutrons. BrightnESS has also teamed up with the Baltic TRAM (Transnational Research Access in Macro-region) Structural Funds project to foster stronger engagement with industry. Thanks to efforts by BrightnESS, ESS also became a member of the ScienceLink Network in June of this year. The network provides ESS with direct access opportunities to work with industrial partners and promote the potential of neutron scattering methods for industrial research and development. Another important collaboration is with the SINE2020 project, particularly in relation to the promotion of industrial uses of neutrons.

Status of deliverables

On the topic of the WP6 deliverables, Gunsenheimer stated that deliverable 6.1 had been submitted and was approved by the European Commission. Milestones 36, 37, 38 and 39 had also been reached. Deliverable 6.2, which concerns the report on results of target group online survey (see above for details), had been delayed compared to the original project time-line. The reasons for this had been communicated to the European Commission, who then agreed to a revision of the due date as part of the upcoming Amendment.

The overall cost expenditure by all partners after one year of operations, stood at 66%, said Gunsenheimer. She did not consider this a major concern as, according to planning, the work package will be well on-



budget in year 2. Gunsenheimer ended her presentation by briefly describing the main WP6 activities during the second BrightnESS year. These include: the submission of deliverable 6.2 and the implementing of the activity plans for each hub (Task 6.1). In Task 6.2, more events are planned to get new partner institutes involved in ESS. Task 6.3 will organise the 7th ILO Meeting and the UK – ESS Industry event. Gunsenheimer accepted that the internal and external approval process for the online survey report is still a risk factor, but that the Research Infrastructures will ultimately acknowledge the usefulness of the report's results.

Q&A

The Q&A session following the presentation centred around awareness-raising activities amongst high school students about physics in general and neutrons research. Was BrightnESS taking any actions towards high school students? Ms Gunsenheimer clarified that the project's outreach activities are currently only related to university students.

Further communication & dissemination activities

Juliette Forneris then took over the WP6 presentation and introduced last year's activities in Task 6.4 (Communication & Dissemination). She highlighted the following achievements:

- Creation of BrightnESS project website, where news, scientific articles, partner information etc. are disseminated. Visitor-statistics are being kept and used to improve the website even further;
- Creation of Corporate Visual Identity and adjourning communications materials for use by all BrightnESS partners. These include roll-ups, leaflets, folders. The corporate materials, which also take into account European Commission requirements, help project partners to communicate to their target groups
- Creation of the BrightnESS Twitter account, to feature project progress and support ESS and partner organisations.

Thus far, said Forneris, the BrightnESS website has received more than 5000 unique visits. The Twitter account has more than 100 followers. Furthermore, the partners in Task 6.4 were also involved in the development of the detector brochures for WP4. She confirmed that all Task 6.4 deliverables and milestones for the first year of BrightnESS had been submitted and approved.

Interaction with SINE2020

Forneris concluded her presentation by emphasizing the collaborative aspects in achieving the project's results, such as the cooperation with the SINE2020 project (regular meetings dedicated to knowledge and idea sharing and promoting each other's project through social media and co-hosting of events). BrightnESS Hub Managers also play a pivotal role in communicating BrightnESS to target audiences and



the general public. The activities for the second year of the project (September 2016 – August 2017) will merge specific regional outreach events with activities shared across the hubs.

Q&A

Participants asked Forneris what is expected from the consortium partners with regard to Task 6.4. She clarified that WP6 is primarily about providing communication materials and helping partners with communication and dissemination content on BrightnESS and ESS where required (by the partners). The GA Representatives also felt that not everybody knows who exactly the Hub Coordinators are, so it would be appreciated if those names (of all Coordinators) were sent to all partner organisations audience. Forneris said this information would be sent to the partners shortly and also shown on the BrightnESS website. Tania Claudio Weber also proposed that the central hubs from WP2 and WP6 could work together, which was agreed by the WP leaders.

7.8 Closing Session & statement by the GA Representatives

In the closing session, Coordinator Roy Pennings stated that the ESS In-Kind Review Committee (IKRC) and the ESS Scientific Advisory Committee (SAC) have been asked to provide their written views on the BrightnESS project and its contribution to the ESS Project programme. Neither had, however been able, to provide such a letter to-date, partly because the periodic meeting dates for both committees were scheduled after the GA-Meeting. In response, Allen Weeks said that in the IKRC BrightnESS has been presented several times over the past years by both himself and Carlo Bocchetta and that the response had been positive. Minutes of the last IKRC-meeting in which BrightnESS is mentioned, is attached in Annex 8-3.

As a final point on the agenda, Pennings then opened the floor for any other questions and comments by GA Representatives on the content or (organisational) delivery of the project. The overall view was that the project was well on course and very well managed by ESS. The General Assembly Representatives then voted unanimously in favour of the following prepared statement:

“Lund, 7th October 2016 – The General Assembly of the H2020 BrightnESS project, in its annual meeting, has taken note of the presentations by the BrightnESS Steering Board and approves the technical and financial progress realised during its first year of operation.”

Pennings subsequently thanked the GA Representatives for their participation and closed the meeting.



ANNEX 8.1: Signed List of Participants in the GA-meeting



**GENERAL ASSEMBLY MEETING
OCTOBER 7
LUND**

No.	Last Name	First Name	Organisation	Signature
1	Füzi	János	Budapest Neutron Centre	
2	Rosta	Laszlo	Budapest Neutron Centre	
3	Vinter	Brian	Copenhagen University	
4	Fornieris	Juliette	Danish Technological Institute	
5	Zangenberg	Nikolaj	Danish Technological Institute	
6	Pugliese	Roberto	Elettra - Sincrotrone Trieste SCPA	
7	Martínez	José Luis	ESS Bilbao	
8	Garrido	Mar Capeans	European Organisation for Nuclear Research	
9	Costa	Raquel	European Spallation Source	
10	Freita-Ramos	Judith	European Spallation Source	



No.	Last Name	First Name	Organisation	Signature
11	Giampietro	Marina	European Spallation Source	
12	Gunsenheimer	Ute	European Spallation Source	
13	Pennings	Roy	European Spallation Source	
14	Richter	Tobias	European Spallation Source	
15	Weeks	Allen	European Spallation Source	
16	Bocchetta	Carlo	European Spallation Source	
17	Hall-Wilton	Richard	European Spallation Source	
18	Pospisil	Stanislav	Institute of Experimental and Applied Physics	
19	Gammino	Santo	Istituto Nazionale di Fisica Nucleare	
20	Pasini	Stefano	Jülich Centre for Neutron Science	
21	Claudio-Weber	Tania	Jülich Centre for Neutron Science	
22	Perrey	Hanno	Lund University	
23	Fröjd	Christer	Mittuniversitetet	
24	Thompson <i>Thomson</i>	Knud	Paul Scherrer Institut	
25	Greenhalgh	Justin	Science and Technology Facilities Council	



No.	Last Name	First Name	Organisation	Signature
26	Linssen	Rik	Technische Universiteit Delft Reactor Enkeltank Delft	
27	Dewhurst	Charles	The Institut Laue-Langevin	
28	PATRIKOV	GABOR	BUDAPEST NEUTRON CENTER	
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ANNEX 8.2: Overview of Work Packages and Tasks

WP no.	WP title	WP Task title
1	Project Management	T1.1 Scientific project management
		T1.2 Financial and administrative project management
		T1.3 Coordination of legal issues and project risk management
		T1.4 Organisation of meetings and Internal Communication
2	Strengthening the In-kind Contribution coordination	T2.1 Preparation of project implementation and training of resources needed
		T2.2 Development and implementation of an In-kind information system for the coordination of IKC activities
		T2.3 Development of an IKC 'Best Practice' system and standards and organisation of collaboration meetings
		T2.4 Creation of an IKC network of Regional Hubs
3	Organisational innovation	T3.1 Completion of the ERIC implementation
		T3.2 Capacity Building in Technology Transfer
		T3.3 Capacity Building of ESS partner organisations in Public Procurement of Innovation
4	Innovation of key neutronic technologies: Detectors and Moderators	T4.1 Neutron detectors - The resolution challenge
		T4.2 Neutron detectors - The intensity frontier
		T4.3 Realising large areas Detectors
		T4.4 Detector Realisation
		T4.5 Moderator testing and development beamline
5	Real time management of ESS data	T5.1 Creating a standard neutron event data stream for different detector types
		T5.2 Creating a standard method for streaming meta-data for fast applied fields
		T5.3 Software to aggregate and make available the neutron event data and sample meta-data
6	Collaboration, Communication and Dissemination	T6.1 Collaboration building and outreach
		T6.2 Enlargement of membership
		T6.3 Strengthening the ILO Network
		T6.4 Communication and Dissemination of Results

Detailed Task descriptions can be found here: <https://brightness.esss.se/about/work-packages>



ANNEX 8.3: Excerpt of the meeting minutes of the In-Kind Review Committee (IKRC) on 18/02/2016, in which BrightnESS was discussed/ mentioned

ESS/IKRC/16/08/A02

9. BrightnESS WP2 presentation

Allen Weeks introduced Carlo Bocchetta (CB), the WP Manager of BrightnESS WP 2, explaining that the funding was granted by the European Commission to facilitate risk reduction for the ESS construction. Carlo Bocchetta explained that the BrightnESS funding covers 18 partners in 11 countries and incorporates three main areas; In--Kind, technical performance and increasing innovation. WP2 concentrates on strengthening the coordination of In--Kind. The IKRC's role is to council and advise on the work being undertaken in WP2 of BrightnESS.

WP2 has a total budget of 4.2 M€ and has 4 tasks:

- WP 2.1. Preparation of project implementation and training of resources needed
- WP 2.2. Development of an In--Kind information system
- WP 2.3. Development of IKC 'Best Practice'
- WP 2.4. Creation of an IKC network of regional hubs.

Carlo explained that the regional hubs will be staffed with In--Kind Field Coordinators. He emphasised that the Coordinators will not take away responsibility from the partner and ESS WP managers. Their role is to help co--ordinate activities, maintaining alignment of the partner plan to the ESS plan and supporting Best Practice.

IKRC (PL) enquired how can BrightnESS impact the In--Kind contributions. Most of these variables will make an impact much later than what is needed. The IKRC is endorsing TAs and In--Kind Agreements now, and BrightnESS expertise will take some time to be fully effective. **ESS (CB)** explained that BrightnESS will set up best practices and establish good working practices. The Field Coordinators will support the upcoming peak of TAs to be endorsed and implemented.

IKRC (DK) suggested that BrightnESS could encourage partners to take on some of the less 'sellable merchandise' – the IKCs deemed less interesting. This would increase the In--Kind percentage.

ESS (AW) added that the European Commission recommended that BrightnESS report twice yearly to the IKRC. He further stated that there is an inconsistent approach to quality over so many partners. BrightnESS brings much needed additional resources to support common working practices and managing quality.

ESS (RG) highlighted the role of Best Practices and how it could support standardisation.

IKRC (NL) noted that there could be a conflict of interest between field coordinators if their respective partners are bidding for in--kind work. **ESS (CB)** replied that ESS would manage any delicate situations and anyway there are very few contested IKCs left.

IKRC (HU) stated that the IKRC is currently focused on contracts at the moment, not so much about the implementation. The support from BrightnESS will be welcome to support implementation and aid dialogue between partners.



ANNEX 8.4: Presentations during the General Assembly meeting