General Assembly Meeting

WORK PACKAGE 2
Strengthening the In-kind Contribution coordination

Carlo J. Bocchetta
Overview of WP2

Strengthening the coordination of In-kind Contributions - Maximise the possibility for ESS and In-Kind partner organisations to deliver value during 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.

Partners: STFC (UK), TUD (NL), INFN & Elettra (IT), ESS-Bilbao (ES), CEA (FR), FZJ (DE), ESS.

4.247 M€, 345 Person-Months (minimum)
Overview of WP2 – Four Tasks

<table>
<thead>
<tr>
<th>WP2.1</th>
<th>WP2.2</th>
<th>WP2.3</th>
<th>WP2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of project implementation and training of resources needed (ESS, CEA, FZJ, INFN, ESSB, STFC)</td>
<td>Development and implementation of an In-kind information system for the coordination of IKC activities (Elettra, ESS)</td>
<td>Development of an IKC 'Best Practice' system and standards (WEB) and organisation of collaboration meetings (Elettra, ESS)</td>
<td>Creation of an IKC network of Regional Hubs (ESS, STFC, TUD, FZJ, ESSB, INFN, CEA)</td>
</tr>
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</table>
# Overview of WP2 - Deliverables

Activities started Sept 2015 (CJB joined Nov 2016)

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>Month</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2.1 Risk assessment and mitigation plan</td>
<td>M3</td>
<td>Accepted</td>
</tr>
<tr>
<td>D2.2 Launch of IKC Best practice online platform</td>
<td>M6</td>
<td>Accepted</td>
</tr>
<tr>
<td>D2.3 Deployment of Management Information System</td>
<td>M12</td>
<td>Submitted</td>
</tr>
<tr>
<td>D2.4 1st Annual IKC Progress Assessment</td>
<td>M13</td>
<td>In progress</td>
</tr>
<tr>
<td>D2.5 2nd Annual IKC Progress Assessment</td>
<td>M24</td>
<td>To do</td>
</tr>
<tr>
<td>D2.6 Revision of IKC Best practice online platform</td>
<td>M30</td>
<td>To do</td>
</tr>
<tr>
<td>D2.7 IKC Work Package Assignment Plan</td>
<td>M36</td>
<td>To do</td>
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</table>
## Overview of WP2 – Milestones (ESS)

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Month</th>
<th>Means of Verification</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS1 Establishment of Regional Hubs</td>
<td>4</td>
<td>Staff in place</td>
<td>Done</td>
</tr>
<tr>
<td>MS2 Definition of workflows</td>
<td>6</td>
<td>Management Chart</td>
<td>Done</td>
</tr>
<tr>
<td>MS3 1st Organisation of annual IKC conferences</td>
<td>6</td>
<td>Agenda and minutes of IKC conferences</td>
<td>In progress</td>
</tr>
<tr>
<td>MS4 2nd Organisation of annual IKC conferences</td>
<td>18</td>
<td>Agenda and minutes of IKC conferences</td>
<td>To do</td>
</tr>
<tr>
<td>MS5 3rd Organisation of annual IKC conferences</td>
<td>30</td>
<td>Agenda and minutes of IKC conferences</td>
<td>To do</td>
</tr>
</tbody>
</table>
Task WP2.1
Highlights WP2.1 - Preparation of project implementation and training of resources

Assessment of ESS project management software to analyse IKC’s (contracted, planned and potential), Implementation, Participation and ESS & partner risk analysis.

Deliverable 2.1 (26 page Report) accepted by EC.
Risk mitigation activities form the basis of work for Regional Hub Field Coordinators (WP2.4).
Highlights WP2.1 - Preparation of project implementation and training of resources

To strengthen the IKC management of BrightnESS and in doing so of ESS, regional hubs will be established in the ESS Partner Countries (see WP 2.4). Qualified Field Coordinators (FC) will be identified and trained to support this task.

Training of staff to understand the ESS, the related political environment, the involvement of the home institute in ESS and familiarization with other related clusters

- FC’s Identified in all Hubs (see WP2.4 below)
- Training sessions held
Task WP2.2
Highlights WP2.2 - Development and implementation of an In-kind information system

Task 2.2 Establish a centralized platform that will provide support to the In-kind Management Coordination Office, management, and governance of the ESS Project. Provide an active database to establish matching the WBS in P6 and Work Package realization with IKC Partners.

1. Activity reporting
2. Project management status reports
3. Documentary evidence for quality assurance and control
4. Process tracking
5. Relations management
Highlights WP2.2 - Development and implementation of an In-kind information system

- Code specification formulated (ESS & Elettra) – March 2016

**IN-KIND CONTRIBUTIONS**
- EOI management
- Tracking interactions between contacts
- Contracts management
- Milestone management

**CONTACTS**
- Individual/Organisation

**EVENTS**
- Organization of events
- Participant registration tool
- Documentation of attendances

**STAKEHOLDER RELATIONS**
- Management of external contacts
- Tracking of activities
- Documentation of communications with external contacts

**CONTACTS**
- Individual/Organisation
Highlights WP2.2 - Development and Implementation of an In-kind information system

The staged writing of the code was assigned to Elettra (approved by EC officer – 25/Jul/2016) with deliverable end Aug 2016 & two updates. This permits an effective & user friendly development of the database.

• D2.3 – Submitted (44 page report): Describes the system which includes the core and most important functionalities and is the official deliverable D2.3 in the grant agreement. Includes the design of the core database and the implementation of the general structure (users, contacts, institutes, in-kind contributions, etc.) on top of which all other components will be added.

• Update 1 (28/2/2017): Improvements and a Dash Board and an on-line reporting system.


• Review (31/8/2018): Improvements and forms for integration with external tools: Indico and CHESS with the storage of acceptance reports.
Task WP2.3
Highlights WP2.3 - Development of IKC 'Best Practice' system and organisation of collaboration meetings

Maximize the common knowledge of how to best execute IKC activities among all actors in the ESS Project. Establish standard approaches to implementation of technical scope through systematic 'Best Practice' workshops and a shared information platform aimed at continuous improvement.

Knowledge will be exchanged and shared across an open communication platform (WEB based). 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 forums focused on specific ESS IKC issues.

Interface done on the BrightnESS WEB page & described in deliverable D2.2 (accepted)
Highlights WP2.3 - Development of IKC 'Best Practice' system and organisation of collaboration meetings

WEB Page: https://brightness.esss.se/in-kind-best-practices/in-kind-process-overview
Highlights WP2.3 - Development of IKC 'Best Practice' system and organisation of collaboration meetings

1st BrightnESS Best Practice workshop has been organized for 14-15 November 2016 in Bilbao, Spain. Attendance by Invitation (80+ attendees). Organised: ESS-Bilbao, Elettra & ESS “Engineering aspects of large-scale In-Kind projects”

Four Sessions (22 speakers):

• Plenary
• Standardization
• Integration
• Project Information Management

Presentations & Conclusions will be put on BrightnESS web page (previous slide)
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

The regional hubs are established and have Field Coordinators that:

- Assist the timely and qualitative delivery of IKC in their region.
- Are involved and support all three phases of the IKC process.
- Have regular meetings between the ESS HQ and the Regional Hubs.
- Participate in the organization and facilitation of Task 2.3 (best practice workshops)

Task 2.4 is directly linked to global ESS Project milestones and key performance indicators.

- Field Coordinators are additional resources for the IK processes.
- Will enhance the communication channels.
- Assist in addressing risks and risk mitigation of IK processes.
- Strengthen interfaces, reinforce quality, standards and best practices by facilitating the flow of critical information between partners.
## Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Up to 19 people active for WP2.4 – with six leaders.

<table>
<thead>
<tr>
<th>Regional Hub</th>
<th>Owner</th>
<th>Field Coordinator</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-West</td>
<td>STFC</td>
<td>Justin Greenhalgh, Philippa Kingston, Deena Fernandes, Louise Dixon, John Webber for the UK</td>
<td>UK, NL</td>
</tr>
<tr>
<td></td>
<td>TU Delft</td>
<td>Toon Verhoeven for NL</td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>FZJ</td>
<td>Stefano Pasini, Tania Claudio Weber</td>
<td>DE, CZ, CH</td>
</tr>
<tr>
<td>Iberia</td>
<td>ESS Bilbao</td>
<td>Fiamma Garcia-Toriello, Estefania Abad Garcia</td>
<td>ES</td>
</tr>
<tr>
<td>Gallia</td>
<td>CEA</td>
<td>Florence Ragon, Antoine Dael</td>
<td>FR</td>
</tr>
<tr>
<td>South-East</td>
<td>INFN</td>
<td>Paolo Mereu, Ornella Leonardi, Andrea Miraglia + 1 new hire</td>
<td>IT, HU</td>
</tr>
<tr>
<td>Nordic-Baltic</td>
<td>ESS</td>
<td>Marie-Louise Ainalem, Miloš Davidović, Carlo J. Bocchetta</td>
<td>DK, SE, NO, IS, LT, LV, EE, PL</td>
</tr>
</tbody>
</table>
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Field Coordinator Roles:

At the ESS: be knowledgeable of the IK processes, ESS master plan, standards, quality control, systems engineering management plans, logistics and related documents, be up to date with ESS IK "cost-book" work-packages both “still to be assigned” and “assigned” – requires training and follow-ups at the ESS.

At the hubs: Track/Assist partner activities. Track/Assist activities shared between different partners - both within the regional hub and between regional hub partners. Report to ESS & Partner Leaders issues that arise or risks in program execution. Where possible propose solutions.

Share lessons learnt
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Activities this past year - FC’s have regular bi-weekly meetings sharing information.

South East
- Recruitment of three distributed staff in Italy
- Liaising with INFN laboratories on various ESS IKC
- Communication within BrightnESS on Italian VAT policy
- Liaison with companies to mitigate risk with deliveries to provide of a network of companies to match ESS schedule.
- Liaison with hub partners on ESS work package execution
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Activities this past year - FC’s have regular bi-weekly meetings sharing information.

Gallia
• Assisted ESS finding industrial partners
• Liaising with Central hub on Shielding & Instruments
• Liaising with Iberia hub on Modulators
• Inform French industry of ESS actions & procurements
• Strengthen Industry-ESS interactions & communication (future workshop)
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Activities this past year - FC’s have regular bi-weekly meetings sharing information.

Central
• Recruitment of staff
• Risk identification on shielding, communication with ESS NSS group
• Sharing VAT issues with other hubs & assisting organization of meetings
• Held several meeting with German, Swiss and Czech partners on instruments and shielding to mitigate risk and share information
• Liaison with Gallia, Iberia and Northwest hubs on common ESS work packages
• Initiative for proposed workshop on shielding
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Activities this past year - FC’s have regular bi-weekly meetings sharing information.

North West

UK
• Established UK project office and recruited 4 staff
• Held UK-ESS Board meetings, one every few months
• Negotiated an agreed UK list of projects to do.
• Set in place governance arrangements (5 sub-project Boards, etc)
• Helped those working on the project with ESS interfaces such as making contacts, use of computer systems, help with getting Technical Annexes prepared, etc.
• Managed agreement that the UK will contribute 3 speakers (WP2.3), one session chair and several other attendees.

NL
• Meeting with Dutch institute for promotion of ESS future membership
• Liaison with industry for ESS involvement & innovation
• Sharing of information & developments with WP2 hubs & ESS
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Activities this past year - FC’s have regular bi-weekly meetings sharing information.

**Iberia**
- Regular meetings with ESSB WP Leaders & Visits/meetings with industry for future procurements
- Follow up and support on the negotiation of new IKW and TA preparation
- Support on risk identification and follow up on mitigation actions
- Monitoring of technical progress (schedules, milestones, interfaces, monthly reports…) and reporting on major problems, delays…
- Support & meetings on quality standards and procedures, logistics, follow up on tenders
- Inter-regional partner support (Gallia, South-east hubs)
- Support of WP2.3 (Bilbao Workshop)
Highlights WP2.4 - Creation of an IKC network of Regional Hubs

Activities this past year - FC’s have regular bi-weekly meetings sharing information.

Nordic-Baltic
Sharing updates from ESS and developments with general IKC with FC’s
Tracking and promoting IK activities in hub countries, notably for ICS and NSS
Updating FC on developments in Estonia and Norway
Sharing of information related to VAT issues in Norway
Support for training sessions at the ESS
Results

- Major objectives attained in first year.
- WP2 Provides additional resources to both ESS and partners for many IK actions
- Minor delays with latest deliverables but submission underway.
- IK Information System will streamline data and keep all ESS participants up to date on actions, provides support for partner-partner interactions.
- IK Best Practice Workshop will lead to sharing of knowledge and recommendations on the extremely important area of engineering, testing and component assembly.
- Field Coordinators track activities highlighting risks and provide support to a wide ranging of topics. They strengthen inter-regional partner communication which mitigates risks and open new opportunities for IK work and support. A network of skilled multi-tasking people has been established that extends international cooperation and will catalyse new opportunities.
Issues not resolved

• We still have to strengthen relationships and communication of BrightnESS goals with institutes within a hub.
Activities and results not achieved

• We have to strengthen inter-regional interactions in the south-east hub. Planned meeting between Italian and Hungarian partners to occur in coming weeks. BrightnESS general meeting has occurred and needs a followup. HU proposed to have a FC within WP2 – process has stalled and will be re-started.

• We have to strengthen interactions with Poland through dedicated encounters and actions for greater involvement especially as installations are on the horizon. A planned meeting with the Nuclear Physics Institute (Krakow) was cancelled and will be followed up as well as with Warsaw and Wroclaw.

• Hiring of hub personnel was not completed until late in the year for many hubs, this affected the spending profile but did not have a major impact on activities as all hubs had FC representative from the start (costs covered internally). An impact may occur in the coming year if inadequate overlap of activities occurs between old and new staff.

• Support of WP2 at the ESS has lessened recently with personnel leaving and maternity. New personnel has been found and will resolve the issue in the coming months.
Costs: Months 1-10

Overall expenditure

Expenditure per cost categories

- Personnel Costs: 65%
- Direct Costs: 19%
- Travel Costs: 63%

> 50%
Costs – Underspending

• Elettra travel support for the BrightnESS workshop is still to be accounted.
• The hiring of personnel as Field Coordinator and/or support for the field coordinator occurred late in the year for many hubs – notably South-East and North-East. Their spending profile will be adjusted and spending will be accelerated to the expected value.
• All spending profiles to be adjusted from linear to actual as requirements from different hubs vary (more or less travel or human resources).
• ESS has underspent on personnel. Additional part-time resources will be brought in to cover aspects of accelerator and integrated control system in support to the Field Coordinator.
Next steps

• **WP2.1:** Continued training at ESS in particular with next steps leading to component installation. Extended meeting focusing on NSS activities and identification and mitigation of risks. Further training on CHESS (document server). General meeting at a hub for Field Coordinators.

• **WP2.2:** Use and improve the IK information system XRM (ESS IK group, ESS IT group and FC’s) and transfer of executable to ESS servers.

• **WP2.3:** Hold Bilbao Workshop on “Engineering aspects of large-scale In-Kind projects” & disseminate information and conclusions. Start planning for next workshop (most probably on Control Systems).

• **WP2.4:** Bring up to speed new FC staff. Initiate FC meetings to start focusing on IK implementation (preparing for installation) – QC, deliveries, systems tests,… Organization of events at hubs. Continuation and strengthening present activities. Strengthen relations between partner institutes within a hub with focused meetings and actions.
Thank You

Carlo J. Bocchetta
Horizon 2020 BrightnESS project (grant no. 676548) - WP2 Leader
Mobile: +46 72-179 24 08
E-mail: carlo.bocchetta@esss.se