EUROPEAN SPALLATION SOURCE

In-Kind Workshop
HEPTech

Allen Weeks
Deputy Director
Project Support and Administration

www.europeanspallationsource.se

January 14, 2014

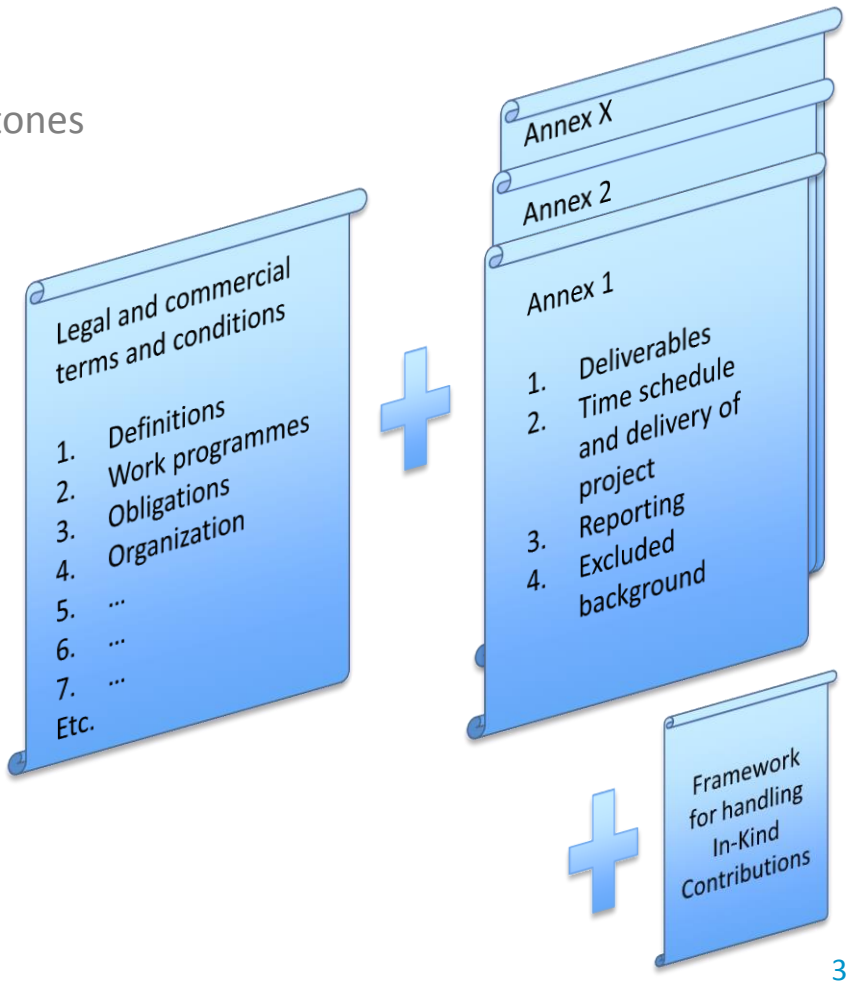
ESS In-kind contributions

- Potential in-kind contributions are defined in ESS Cost Book
- Each contract to follows a pre-defined structure
- The delivering party is wholly responsible for the contribution (technical, financial, commercial)
- In-Kind Review Committee to evaluate all IKC agreement proposals
- ESS Council to approve all in-kind contracts
- Based on final evaluation the Member Country gets accredited the value of the In-Kind Contribution

ESS In-kind Contract structure

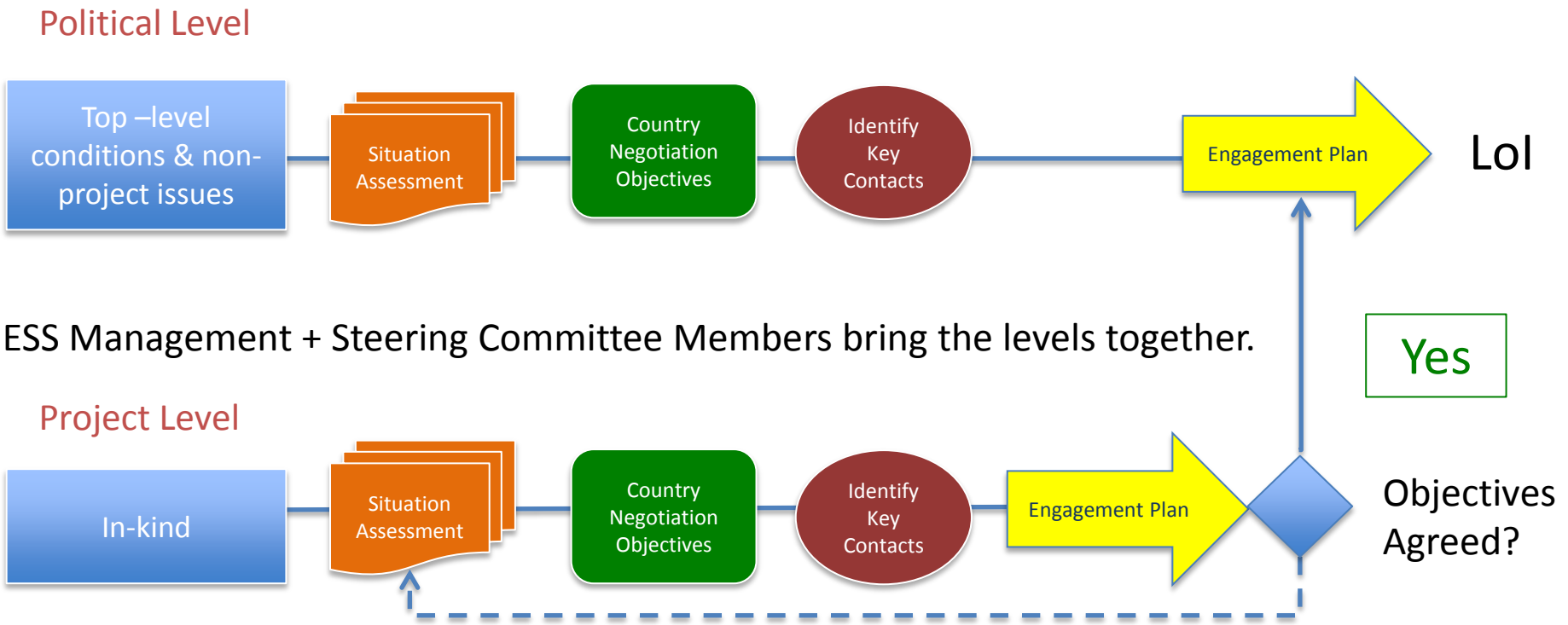
"Framework for handling In-Kind Contributions" defines minimum content

- Technical description, specification
- Project plan – schedules, deliverables, milestones
- Attributed value
- Terms of delivery, transportation
- Quality control
- Documentation – op. manual, parts list etc.
- Training
- Technical and financial control systems
- Appointment of responsible personnel
- Roles and responsibilities
- Ownership of background, foreground
- Use and dissemination of foreground
- Licenses and rights
- Access rights
- Transfer of ownership
- Procedures of reporting
- Formal evaluation
- Risk assessment and management



The ESS negotiation process must combine the political and project needs.

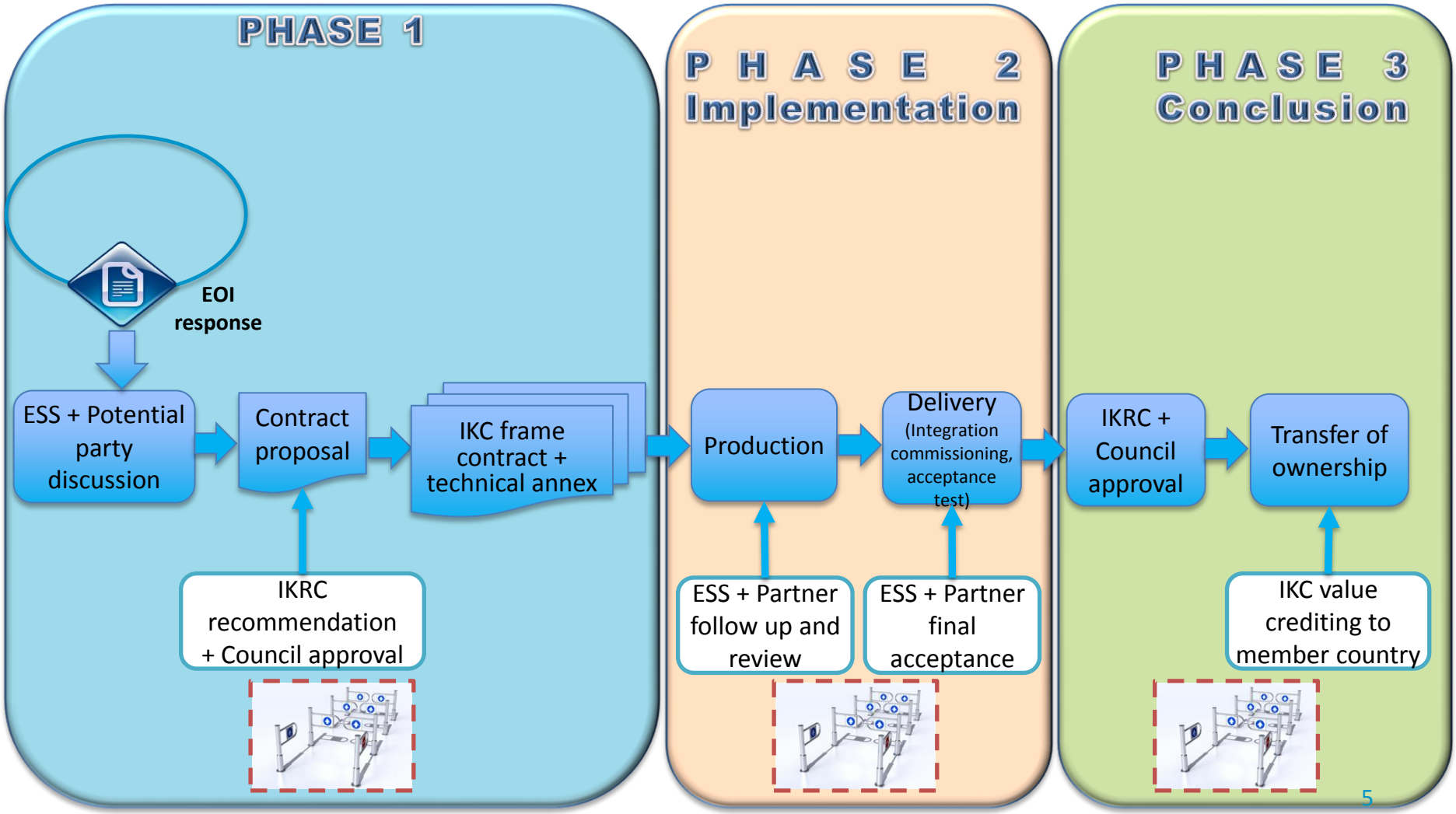
SE and DK Negotiators + Ministries in Member Countries negotiate high-level amounts as a percentage of the project and mix of in-kind and cash.



ESS Project + Collaboration Partners negotiate In-kind packages.

The IKCM Process has three basic phases: a beginning, a middle, and a conclusion.

EUROPEAN SPALLATION SOURCE



The process of identifying partners is underway, but just at the beginning.

EUROPEAN SPALLATION SOURCE

May 2

- **Call for EOI sent out**
  Target mailing, website publishing, conferences/events

TDR
Cost Book

May 2-Present

- **Active solicitation period**
  Period of meetings and communications with potential partners to encourage participation and answer questions

Aug. 15-On-going

- **EOI Evaluation started**
  Prioritization based on schedule, need, relevance

Competence
Relevance

Discussions on-going

New calls as WPs mature

So far 131 organizations from 20 countries have replied.
We in ESS have to be proactive in seeking partners, we can't wait.

Call for Expressions of Interest
Scope & Criteria

EUROPEAN SPALLATION SOURCE

Based on TDR

Cost Book

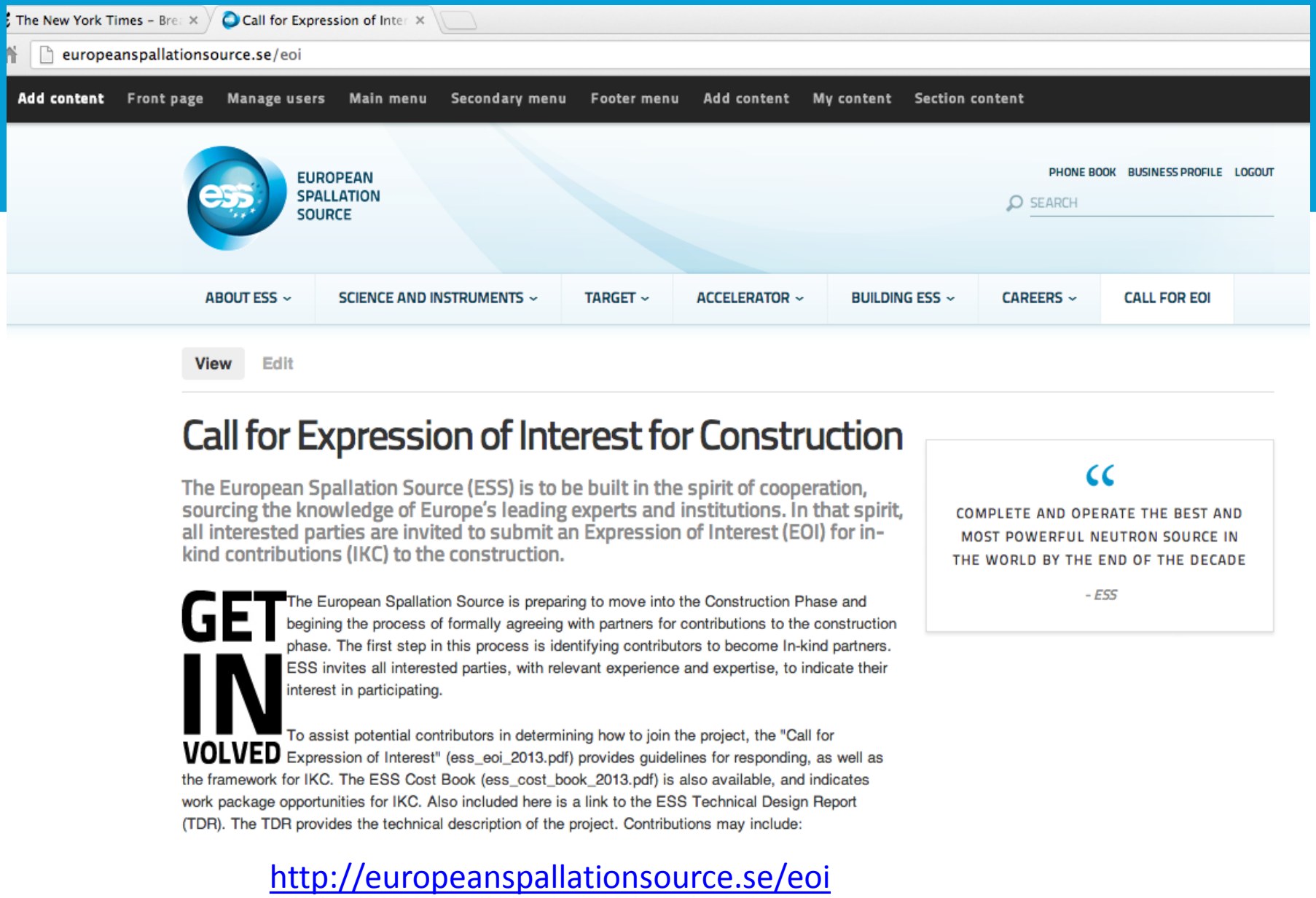
May contribute “component” or “work”

Slightly different for Accelerator, Target & Instruments

Competence of the team(s) responding, references

We expect there will be partnering on Work Packages

After EoI response, a detailed discussions for IKC begin



http://europeanspallationsource.se/eoi

Instrument Proposals 2013: Part 1

EUROPEAN SPALLATION SOURCE

Name	Proposer	Description
Compact SANS	Lise Arleth, KU Joachim Kohlbrecher, PSI	20m SANS optimized for small sample volumes
Versatile SANS: SKADI	Henrich Frielinghaus, FZJ partners: CEA & TU-Delft	55m SANS optimized for flexibility, polarization and small Qs
Horizontal Reflectometer: FREIA	Hanna Wacklin, ESS	Soft matter & life sciences reflectometer optimized for kinetics
Horizontal Reflectometer: THOR	Markus Strobl, ESS (based on HZB concept)	Flexible liquids reflectometer
Vertical Reflectometer: ESTIA	Jochen Stahn, PSI Marite Cardenas, KU	Selene-type focusing reflectometer for small samples
Vertical Sample Reflectometer	Alexander Ioffe, FZJ Dieter Lott, HZG Stefan Mattauch, FZJ	Versatile magnetism reflectometer, optimized for high resolution and small samples
General-Purpose Powder Diffractometer: MODI	Paul Henry, ESS	Crystal-monochromator powder diffractometer optimized for in-situ chemistry and kinetics
Powder Diffractometer: POWHOW	Werner Schweika, FZJ	Highly versatile bispectral powder diffractometer
Hybrid Diffractometer: HEIMDAL	Mogens Christensen, Aarhus	Powder diffraction, SANS and imaging in a single instrument, optimized for in-situ processes

Instrument Proposals 2013: Part 2

EUROPEAN SPALLATION SOURCE

Name	Proposer	Description
Engineering Diffractometer: BEER	Andreas Schreyer, HZG Petr Lukas, Řež	Materials & engineering diffractometer with integrated physical simulator for in-situ engineering studies
Wide Bandwidth Chopper Spectrometer: VOR	Pascale Deen, ESS A Vickery, KU	24m Chopper spectrometer optimized for broad energy suveys of small samples and kinetics
Bispectral Chopper Spectrometer: T-REX	Thomas Brückel, FZJ Jörg Voigt, Niccolo Violini	150m Chopper spectrometer optimized for magnetism and materials sciece
Cold Chopper Spectrometer: C-SPEC	Wiebke Lohstroh, TUM	120m General-pupose cold chopper spectrometer
Time-Focusing Spectrometer: Tempus Fugit	Andrea Orecchini, INFN Alessandro Paciaroni, Perugia	Thermal crystal-monochromator chopper spectrometer with time focusing
Crystal-Analyser Spectrometer: CAMEA	Henrik Rønnow, EPFL	Spectrometer with continuous angular and multiple energy analysis for functionally advanced materials and extreme environments
High-Resolution Spin Echo: ESSENSE	Michael Monkenbusch, FZJ Stefano Pasini, FZJ	High-resolution neutron spin-echo spectrometer, accessing 1µs Fourier time with superconducting coils

Industry and Partner Days

Czech Republic

18. September – Prague

Denmark

30. September – Lyngby (DTU)

In collaboration with BSS

Estonia

26. September – Tallinn and Tartu

Hungary

4. October – Budapest

Italy

17. June – Rome

Lithuania

13. September – Vilnius

Norway

24. September – Oslo

Spain

17. June – Partner Dinner Madrid

Switzerland

20. June – Villingen

Upcoming Events:

Germany – January

France – February

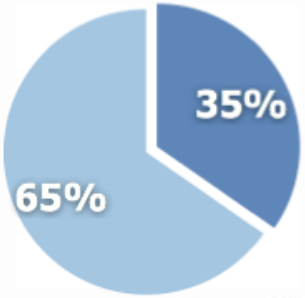
Netherlands – February

The In-kind potential represents more than one-third of the project value.

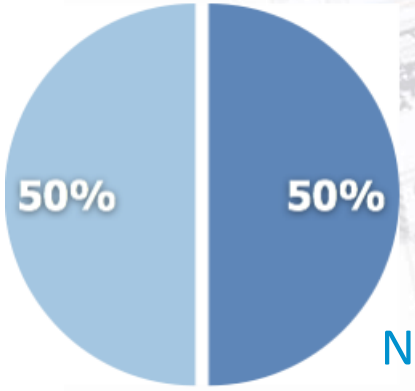
Total construction cost:

€ 1,84 billion

€ 666 million IKC or 36%

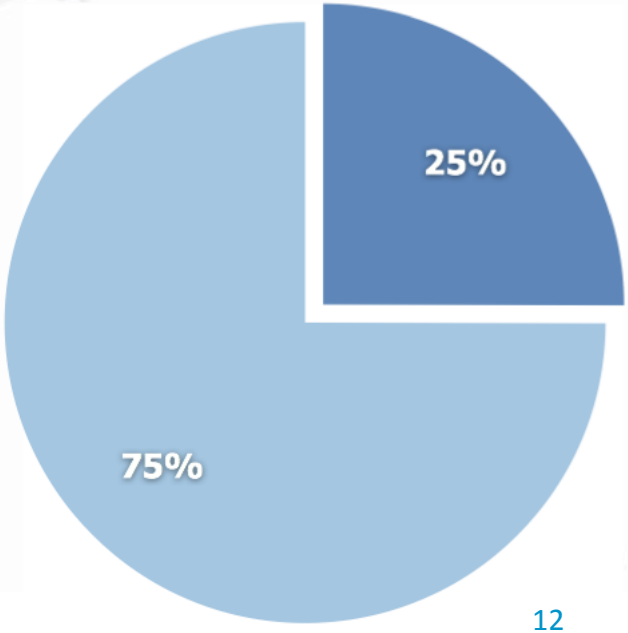


Target station €154M
IKC €100M



NSS €350M
IKC €175M

Accelerator €522M
IKC €392M

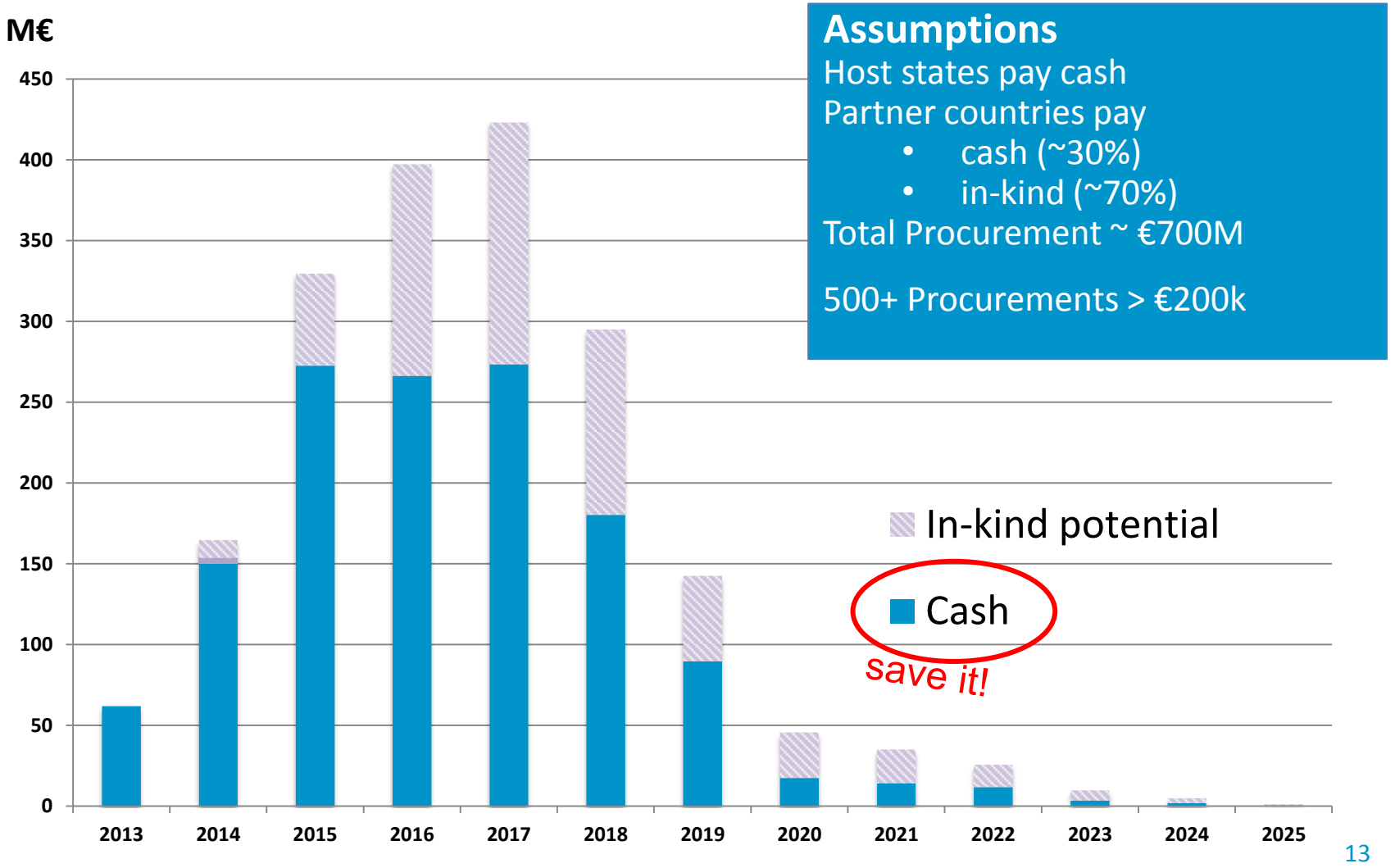


In-kind

Cash

Procurement will still be a critical success factor in the project, both for cost and schedule.

EUROPEAN SPALLATION SOURCE



Assumptions

Host states pay cash

Partner countries pay

- cash (~30%)
- in-kind (~70%)

Total Procurement ~ €700M

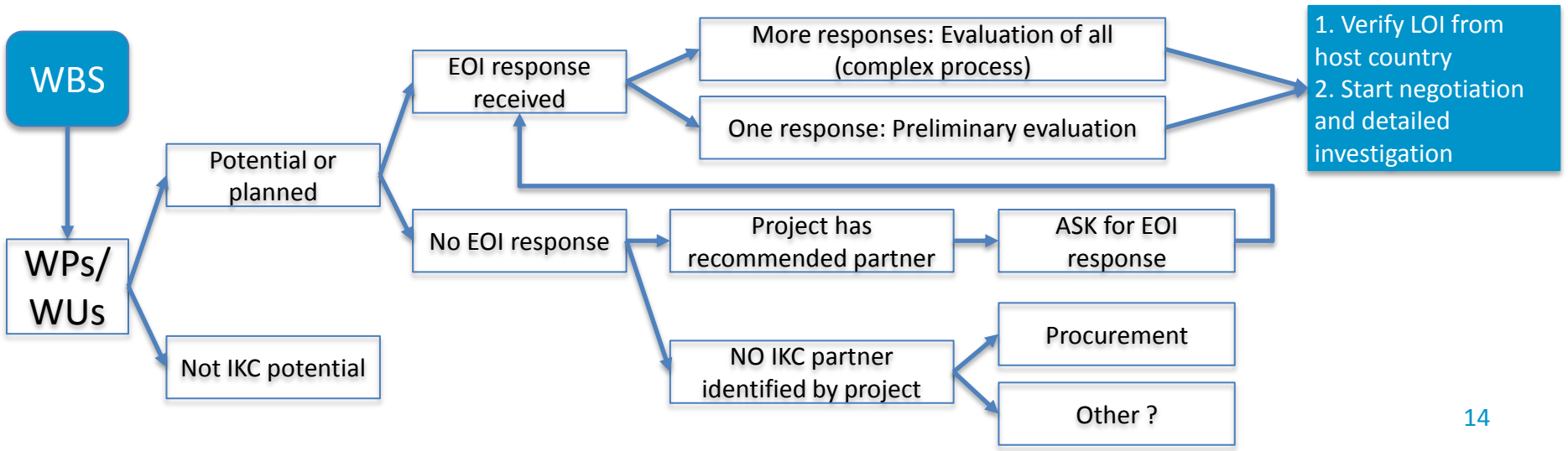
500+ Procurements > €200k

The ESS Strategy is maximize in-kind contributions.

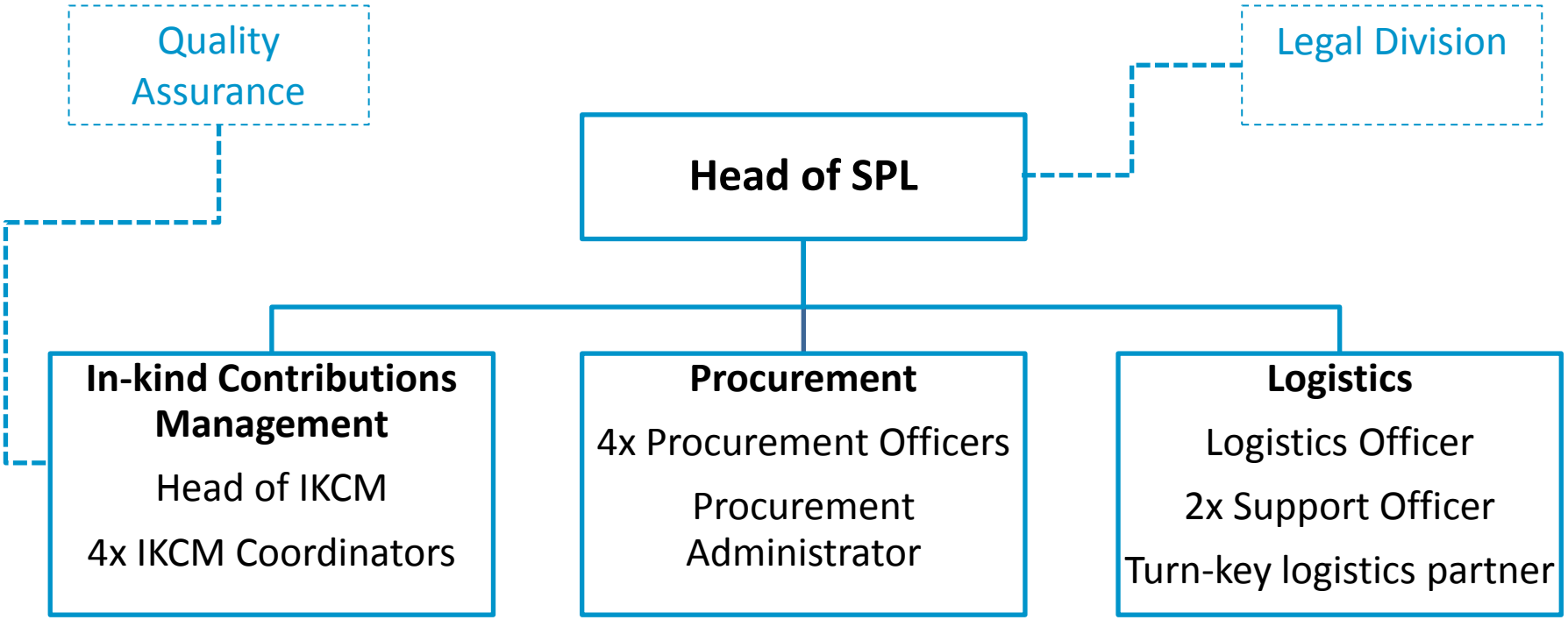
EUROPEAN SPALLATION SOURCE

+ In-kind frees up cash
+ In-kind brings expertise to the project
+ In-kind allows for more work in parallel

- There is less direct control
- There is more uncertainty (risk)
- Resources and time must be applied to relationships



The Supply, Procurement & Logistics (SPL) team must be in place by the middle of 2014.



- The SPL Division is the Contracting Authority in ESS
- The Head of SPL determines procurement procedures and awards contracts
- The Procurement Officers and ICKM Coordinators manage contracts

Total 14 Staff

Members of In-Kind Review Committee

Name	Country	Affiliation
Dr. Petr Šittner	CZECH REPUBLIC	Institute of Physics ASCR (Fyzikální ústav AV ČR, v. v. i.)
Søren Schmidt	DENMARK	DTU Physics, Department of Physics, FYS-NEXMAP, Technical University of Denmark
Prof. Jörg Pieper	ESTONIA	Institute of Physics, University of Tartu
Alexander Müller	FRANCE	CNRS – Institute National de Physique Nucléaire et de Physique des Particules
Dr. Ulrich Breuer	GERMANY	Karlsruhe Institute of Technology Helmholtz Zentrum Berlin
Dr. Tamás Grósz	HUNGARY	Research Centre for Natural Sciences, Budapest
Marco Marazzi CHAIR	ITALY	Sincrotrone Trieste S.C.p.A., Trieste
Dr. Wim Bras	NETHERLANDS	European Synchrotron Radiation Facility, Grenoble
Bjørn C Hauback VICE-CHAIR	NORWAY	Physics Department, Institute for Energy Technology (IFE)
Prof. Adam Maj	POLAND	Institute of Nuclear Physics, Polish Academy of Science
Prof. Ulf Karlsson	SWEDEN	KTH Royal Institute of Technology
Dr. Peter Allenspach	SWITZERLAND	Paul Scherrer Institute (PSI)
Dr. Uschi Steigenberger	UNITED KINGDOM	ISIS – Science & Technology Facilities Council