



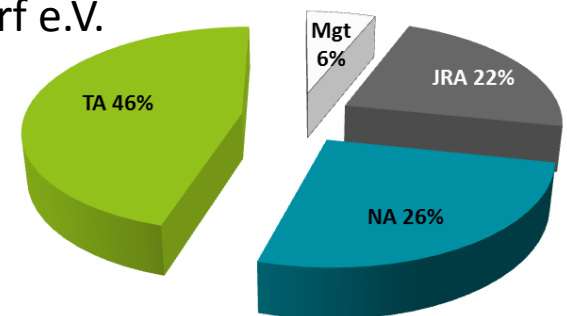
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Helmholtz-Zentrum Dresden-Rossendorf e.V.

2nd Meeting of European User Offices
5-6 April 2016, European XFEL



CALIPSOplus in a nutshell

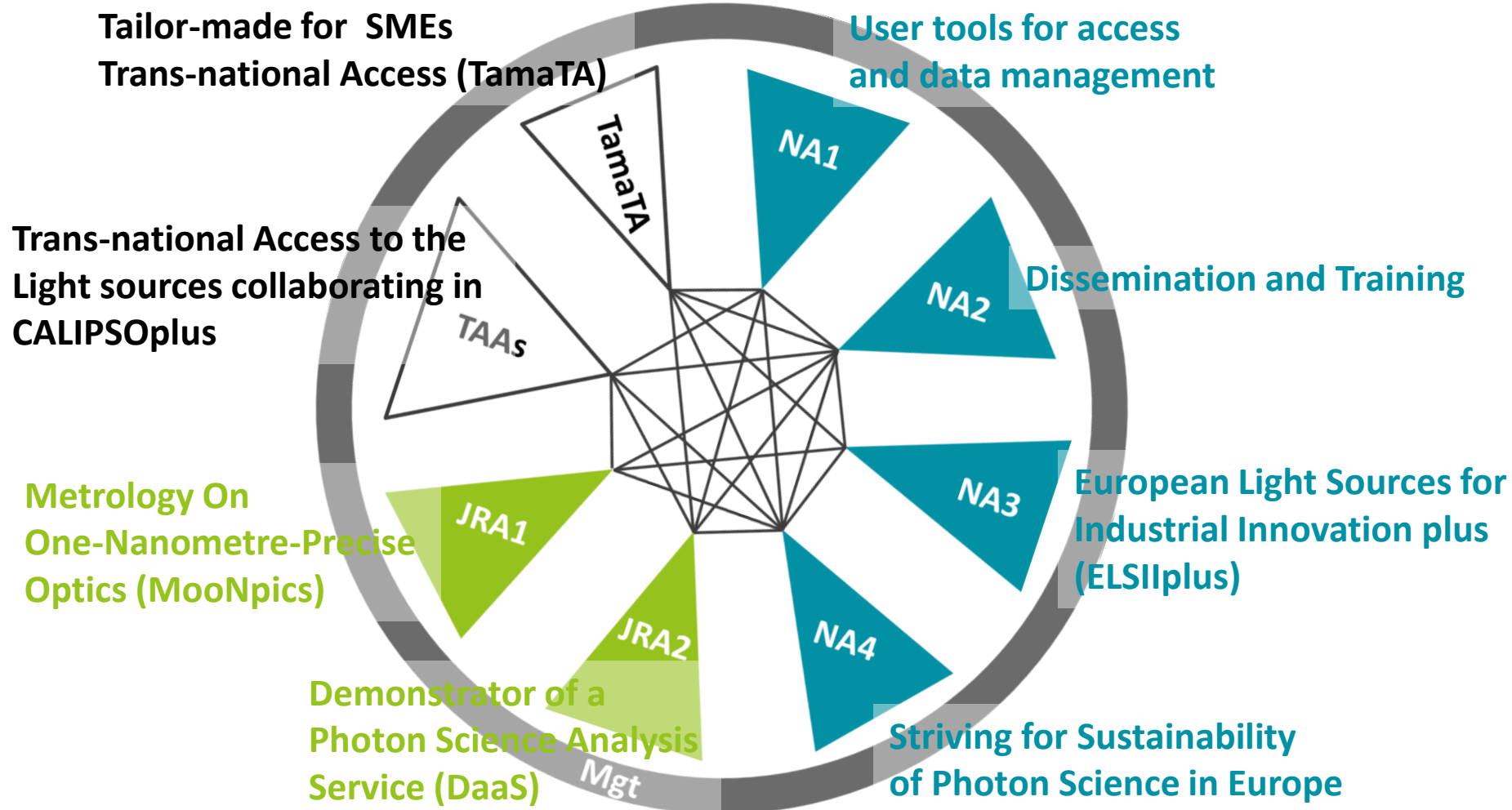
- Integrating Activity for *Advanced* Communities in reply to the call INFRAIA-01-2016 (Material Sciences and Analytical facilities/ Synchrotron radiation sources and Free Electron Lasers)
- Building on the achievements of IA-SFS (FP6, 2004–2009), ELISA (FP7, 2009-2011), CALIPSO(FP7, 2012-2015), all coordinated by ELETTRA
- Title: **Convenient Access to Lightsources OPen to Innovation, Science and to the World**
- Coordinated by Helmholtz-Zentrum Dresden-Rossendorf e.V. represented by Manfred Helm
- Budget: 10 MEUR
- 19 Partners, 3 associated partners, several observers
- 4 Networking Activities, 2 Joint Research Activities
- Provision of more than **82,500 hours of trans-national access** to **14 synchrotrons** and **8 free electron lasers**
- **Trans-national access tailor-made to SME** offered by 10 facilities
- Deadline for proposal submission: March 30th, 2016
- Prospective running time: January 1st, 2017 – December 31st, 2020



Light sources collaborating in CALIPSOplus



CALIPSOplus work packages



Overall management

- 0.5 PM/ partner for drafting reports and participating in the annual meetings
- **Innovation manager** (elected among the members of the Executive Board (EB)) to monitor results of R&D activities, to identify opportunities for turning them into innovations and to report against the EB
- **Project manager** also in charge of **coordination of activities to promote gender-balance** and rapporteur on corresponding activities and results to the EB

Trans-national Access (TA)

- **Decentralised management** of the access
- **Representative of TA providing facilities** reporting on performance of TA programme (recent numbers on access provision, user publications, fraction of women among the PIs and authors)
- **Incentive for users to choose „gold“ open access** route for publishing their results (up to 10 publications/y, high impact journals, user groups with low research budget)
- **Up to 5 users to be invited to the annual meetings** to report on their results

NA1 - User tools for access and data management I

WP leaders C. Blasetti (f, ELETTRA) and M. van Daalen (f, PSI)



European Synchrotron and FEL User Organisation ESUO

- ESUO secretary to ensure continuity of the activities
- Complement ESUO by delegates from hitherto not represented states with strong interest in European light sources
- Co-organisation of annual meetings and of meetings with light sources directors
- Organisation of specific sessions at the annuals meetings dedicated to tackle gender imbalance within the light sources community
- Organisation of outreach events
- „Mentoring“ for new users by experienced user groups (exchange platform as part of the [ESUO section on wayforlight](#))



Network of European user offices

Annual meetings of the complemented by remote interactions aiming at

- sharing best-practice
- increasing efficiency and coordination of the services offered to users
- harmonising deadlines („staggered“ deadlines)
- Suggesting and implementing measures to stimulate an increase of light sources use by women scientists
- defining of a common set of data to realise a solid user statistics



Mitglied der Helmholtz-Gemeinschaft

Dr. Barbara Schramm | FSPP | www.hzdr.de

The *wayforlight* portal

to evolve into the pivotal platform for light sources use and providing a single entry point for proposal submission to all light sources in Europe

- 2 PM per partner for IT staff to solve technical problems related to the implementation of a way for proposal submission through *wayforlight*
- Development of version 2.0 of Standardised Proposal Format in close collaboration with user offices by month 18
- Creation of an industry dedicated sections on *wayforlight*
- Proposal “Dashboard” for users to monitor status of all proposal

Data management plan

defining data ownership, data curation, data archiving and open access to data based on the data policies of the individual partners

Promotion of Umbrella (umbrellaid.org)

- Regular meetings of the Umbrella collaboration
- Organisation of (Umbrella-)user meetings
- Development of an online e-learning tool
- Creation of a technical helpdesk
- Close collaboration with other federated identity management platforms

(RDA, FIM4R)

NA2 - Dissemination and Training

WP leaders A. Vollmer (f, HZB) and K. Norén (f, MAX IV)



Dissemination

- CALIPSOplus website and accounts in appropriate social media
- Booklet on research and discovery with advanced light sources for high school kids and the general European public

Inclusion

- Visits to each major university in scientifically less active European countries to hold a science colloquium on the possibilities of light sources
- Twinning programme: experienced user groups hosting colleagues from EU-13 countries during their beamtime

Lifelong learning

- Focused tutorials and exchange programme for engineers and technicians

Schools and e-learning material

- 3 HERCULES schools (one month training coordinated by the University Grenoble Alpes)
- 3 one-week long HERCULES specialised courses in EU-13 countries
- Publication of e-books on fundamentals of neutron and X-ray interaction with matter and of a set of high-quality videos of lectures given at the HERCULES schools

NA3 - European Light Sources for Industrial Innovation plus (ELSIplus)

WP leaders E. Mitchell (m, ESRF) and A. Sanchez (m, ALBA)

- Appointment of an Industrial Advisory Board
- Strengthening of the light-source industry and business-office staff network
- Development of common templates for non-disclosure and feasibility/ access agreements
- Industry section of wayforlight available in several languages
- Awareness raising campaigns for all-round support in delivery of light source application from experiment discussion, feasibility test, full access and data analysis reaching out local networks of enterprises around the light sources
- Provision of limited beamtime for feasibility studies free-of-charge
- White paper on how Europe best can support effective and efficient industrial use of light sources in the longer term

TamaTA - Tailor-made for SMEs Trans-national Access

WP leaders A. Sanchez (m, ALBA) and E. Mitchell (m, ESRF)

- Remote access to a pool of light sources
- Simple application procedure with proposal submission through wayforlight
- Review panel with strong background in industrial research
- Primary evaluation criterion is scientific excellence, secondary criteria are innovation potential and potential impact
- Access is granted in form of a “voucher” for up to 8 hours of beamtime and 20-80 hours of data analysis (depending on infrastructure)
- No request for drafting report or publishing the results as SMEs are exempt of the request to publish results from EU funded activities

JRA1 - Metrology On One-Nanometre-Precise Optics (MooNpics)

WP leaders H. Sinn (m, European XFEL) and E. Ploenjes (f, DESY)

- Development of metrology on diffraction limited X-ray optics up to single-nanometer figure error and 20 nrad rms slope error precision
- Particular focus on long mirror (up to 1 m)
- Collaboration with ZEISS and Winlight X
- Development of software for focal spot reconstruction and fast mirror alignment to cope with spot sizes reached with these ultra-high performance optics

JRA2 - Demonstrator of a Photon Science Analysis Service (DaaS)

WP leaders M. van Daalen (f, PSI) and A. Goetz (m, ESRF)

- Development of demonstrators for remote data analysis for some selected archetypal experiments
- Demonstrators to be implemented at the individual facilities
- Web portal to ensure users to have a common user experience
- particularly interesting for experiments generating large data volumes

NA4 - Striving for *Sustainability* of Photon Science in Europe

WP leaders M. Helm (m, HZDR) and U. Krell (f, DESY)

Development of a portfolio of strategies to ensure sustainability of trans-national access to accelerator-based light sources and of the activities and achievements of the European light sources community

- **Business plan for ESUO** to become a truly independent organisation
- **Business plan for the wayforlight portal** based on a strong commitment of the facilities
- **Sustainability plan for the quasi multi-sited light source infrastructure “CALIPSOplus”** in particular for provision of high quality user access, training activities, joint research activities, activities targeting industry, upgrading & financing, strongly based on establishment of specific platforms and building upon deliverables of the individual workpackages
- **Concept for a Joint European Travel Office (JETO)** as a joint venture of all European physical research infrastructures to ensure sustainability of the Trans-national Access programme

Acknowledgement:

Many thanks to the CALIPSOplus consortium

for the excellent collaboration on the proposal preparation !

Thank you very much for your attention!

CALIPSOplus partners



Participant No *	Participant organisation name	Country
1 (Coordinator)	Helmholtz-Zentrum Dresden-Rossendorf e.V.	Germany
2	Ankara Universitesi	Turkey
3	Aarhus Universitet	Denmark
4	Consortio para la Construcción, Equipamiento, y Explotación del Laboratorio de Luz de Sincrotrón	Spain
5	Centre Nationale de la Recherche Scientifique	France
6	Stiftung Deutsches Elektronensynchrotron DESY	Germany
7	Diamond Light Source limited	UK
8	ELETTRA – Sincrotrone Trieste SCPA	Italy
9	European X-Ray Free-Electron Laser Facility GmbH	Germany
10	Helmholtz-Zentrum Berlin für Materialien und Energie	Germany
11	Istituto Nazionale di Fisica Nucleare	Italy
12	Installation Européenne de Rayonnement Synchrotron	France
13	Karlsruher Institut fuer Technologie	Germany
14	Lunds Universitet	Sweden
15	Paul Scherrer Institut	Switzerland
16	Stichting Katholieke Universiteit	The Netherlands
17	Synchrotron Light for Experimental Science and Applications in the Middle East	Jordan
18	Société Civile Synchrotron Soleil	France
19	Uniwersytet Jagiellonski	Poland

Associated partners:

- European Molecular Biology Laboratory (EMBL)
- Science and Technology Facilities Council (STFC), UK
- Helmholtz-Zentrum Geesthacht (HZG), Germany



CALIPSOplus summary of TA provision

Access provider short name	Short name of infrastructure	Installation		Installation Country code	Type of access	Unit of access	Unit cost (UC) (€)	Min. quantity of access to be provided*	Access costs		Estimated number of users	Estimated number of user projects
		Nr	Short name						On the basis of UC	As actual costs		
HZDR	ELBE	1	FELBE	DE	TA-uc	hour	90	600	54,000		20	10
AU	ASTRID2	1	ASTRID2	DK	TA-uc	hour	25	6,000	150,000		60	40
CELLS	ALBA	1	ALBA	ES	TA-uc	hour	101.12	1,608	162,593		68	36
CNRS	CLIO	1	CLIO	FR	TA-uc	hour	55.00	1,000	55,000		40	20
DESY	PETRAIII	1	PETRAIII	DE	TA-uc	hour	49.38	5,468	270,021		30	80
	FLASH	1	FLASH	DE	TA-uc	hour	437.61	323	141,349		42	7
DIAMOND	Diamond	1	Diamond	UK	TA-uc	hour	156.3	3,692	577,060		165	45
ELETTRA	ELETTRA	1	ELETTRA+FERMI	IT	TA-uc	hour	20	13,552	271,040		355	205
XFEL	XFEL	1	XFEL	DE	TA-ac	hour		444		8,488	60	30
HZB	BESSY II	1	BESSY II	DE	TA-uc	hour	93.86	4,000	375,420		60	35
INFN	DAFNE-SPARC	1	DAFNE-SPARC	IT	TA-uc	hour	75.82	800	60,656		20	12
ESRF	ESRF	1	ESRF	F	TA-ac	hour		168		12,084	4	4
KIT	ANKA	1	ANKA	D	TA-ac	hour		168		14,570	4	4
ULUND	MAX IV	1	MAX IV	SE	TA-uc	hour	15	11,152	167,280		190	95
PSI	SLS	1	SLS	CH	TA-uc	hour	60	3,168	190,080		50	45
	SwissFEL	1	SwissFEL	CH	TA-ac	hour		500		50,000	150	10
RU	FELIX	1	FELIX+FELICE+FLARE	NL	TA-uc	hour	148.22	400	59,288		40	20
SESAME	SESAME	1	SESAME	JO	TA-ac	hour		1000		24,525	80	40
SOLEIL	SOLEIL	1	SOLEIL	FR	TA-uc	hour	40.17	11,292	453,600		380	380
SOLARIS	SOLARIS	1	SOLARIS	PL	TA-ac	hour		960		12.250	16	8

CALIPSOplus management

