ALBA phase III BL proposals

Caterina Biscari

ALBA-CELLS Director

Where we are

BL01 – MIRAS
Synchrotron infrared microspectroscopy BL

BL04 – MSPD, ES1: HR-PD, ES2: HP-PD
High-resolution & High-pressure powder diffraction BL

BL09 – MISTRAL
Transmission soft X-ray cryo-nanotomography BL

BL11 – NCD
Small angle X-ray scattering BL

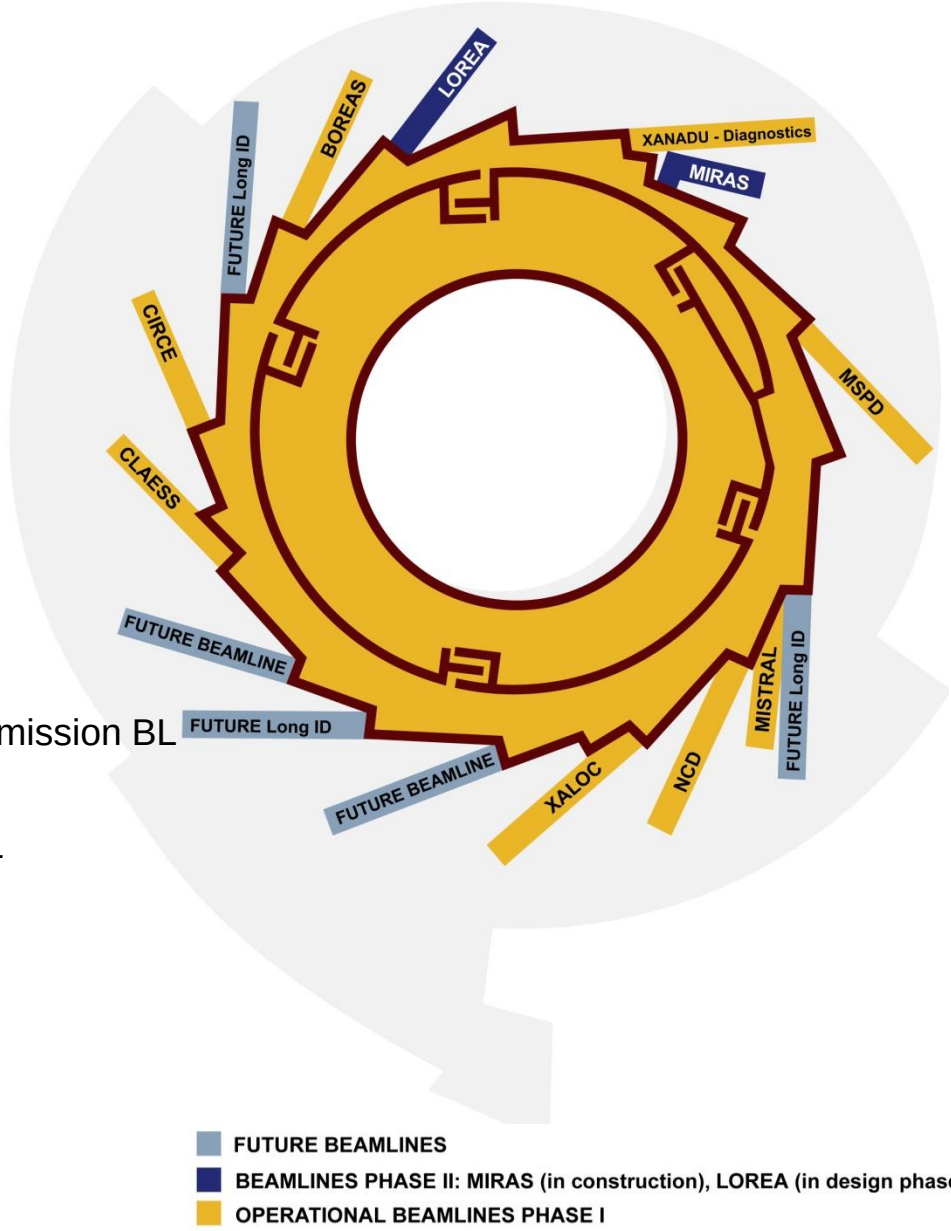
BL13 – XALOC
Macromolecular crystallography BL

BL22 – CLAESS, ES1: EXAFS & XANES, ES2: XES
X-ray absorption and emission spectroscopy BL

BL24 – CIRCE, ES1: PEEM, ES2: NAPP
Electron microscopy & near-ambient pressure – photoemission BL

BL29 – BOREAS, ES1: HECTOR, ES2: MARES
Soft X-ray resonant absorption (XMc/ID) & scattering BL

BL31 – LOREA
Angle-resolved photoemission spectroscopy BL



Where we are

Phase I is almost finished:

XES @ CLAESS & MARES @ BOREAS
will enter in operation during 2014

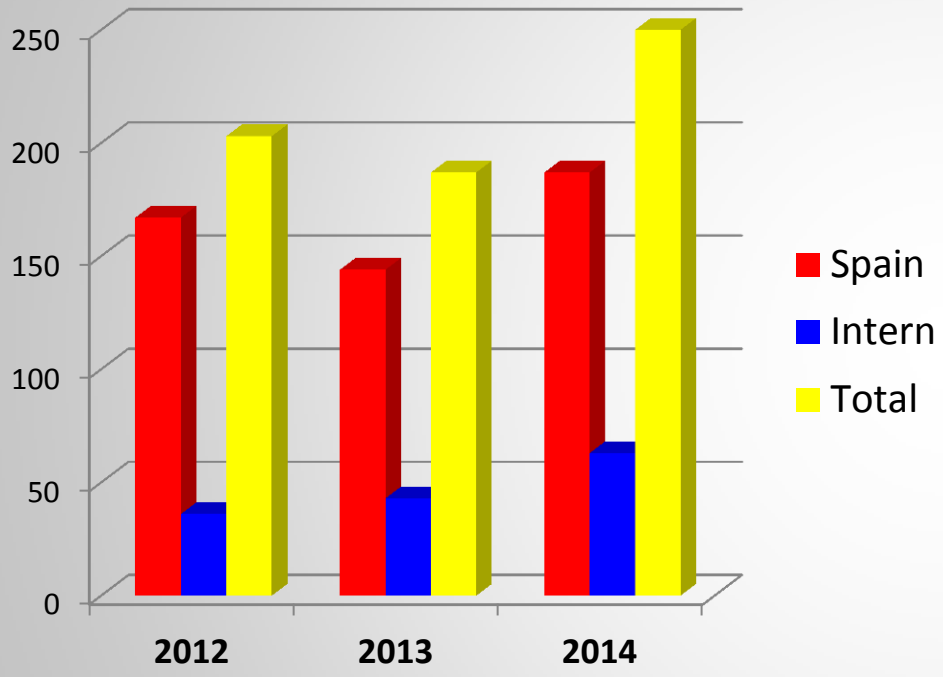
Phase II has started:

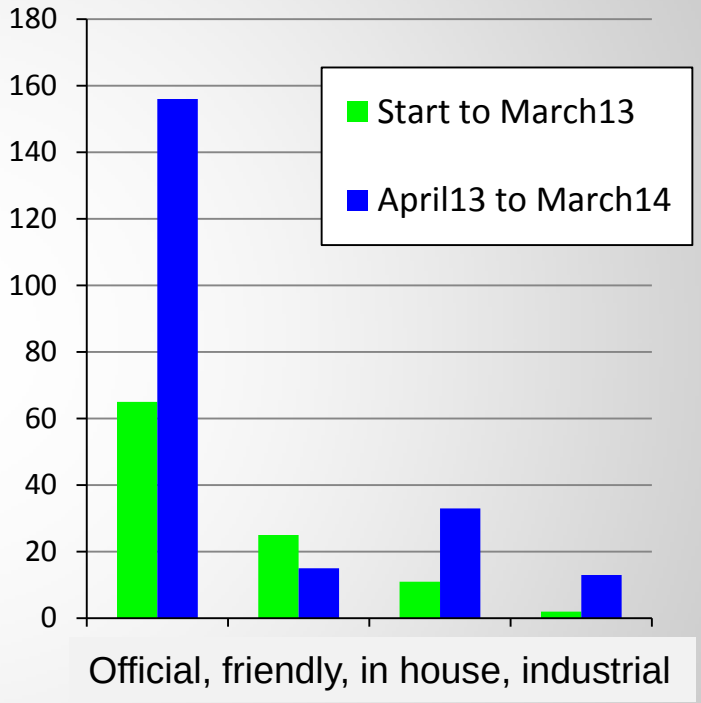
MIRAS and **LOREA** projects on-going

Funded 50% from ALBA remnant and 50% from Spanish structural funds (period 2014 – 2020).
(Not to be confused with H2020 funding)

BL responsibles are under recruitment.

User calls and experiments





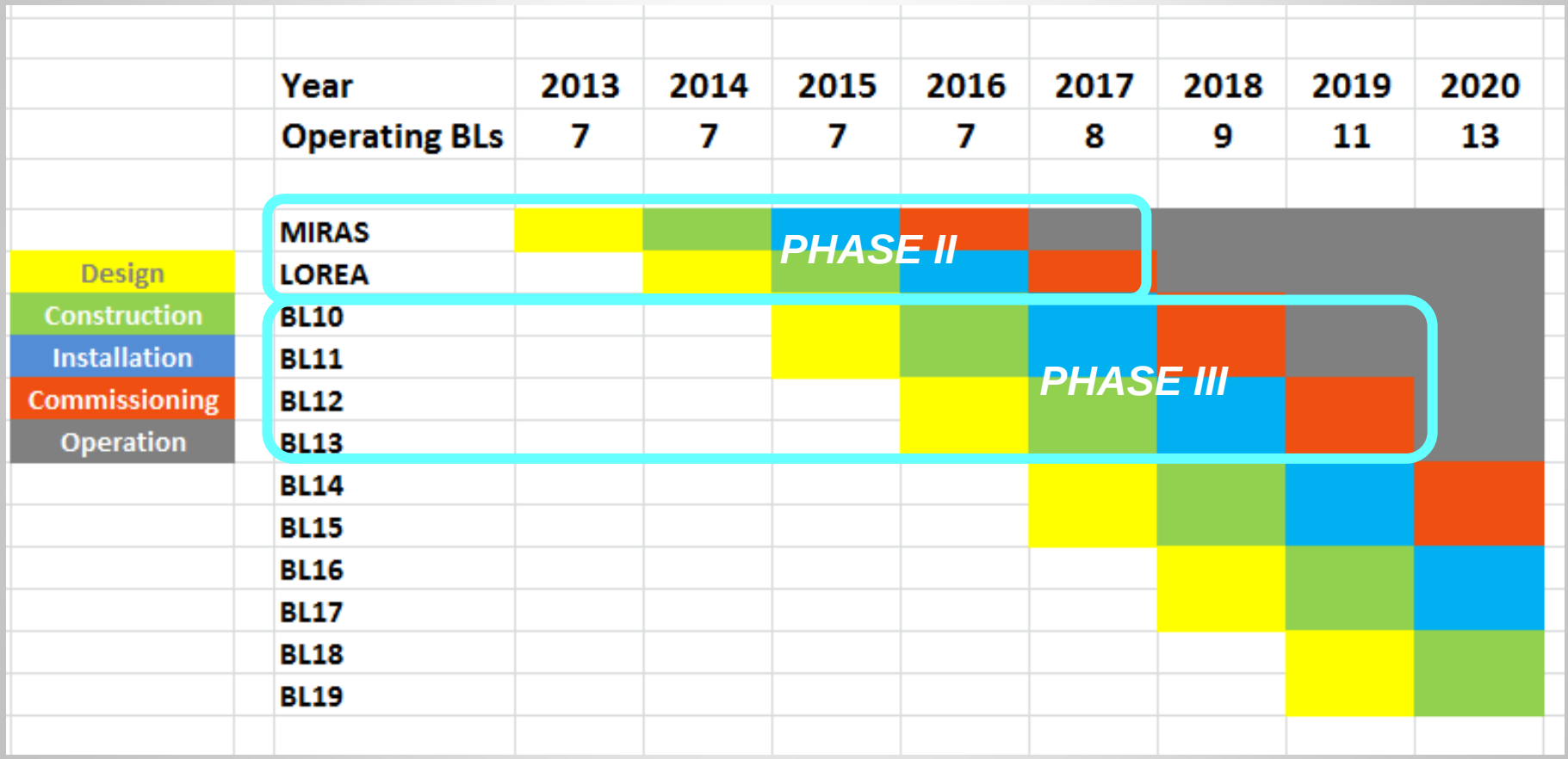
Average Overbooking factor: 2 – 2 - 2.5

Non national
2012 – 18%
2013 – 22%
2014 – 26%

- 2014 user call resolution published on 26 March
- From 2015 on two user calls per year with regular calendar, soon available
- Phase I BL staff completed – Better user support and possibilities for scientist to get involved in next BLs projects
- New BLs will be started with related staff

General Plan

Doubling ALBA Instruments by 2020



Phase III procedure (for 2015-2016 period) (with the best knowledge we have in April-2014)

1. AUSE/ALBA meeting in September 2013
2. AUSE/ALBA survey in Autumn 2013.
3. Workshop @ ALBA on 10th – April, 2014
4. Pre-selection of (6~7)proposals *for appointing ALBA spokesperson*, end of April.
5. Written scientific cases to SAC in September 2014
6. Presentation of proposals to SAC in November 2014
7. SAC advise on a priorized list before end of 2014.

Phase III procedure (for 2015-2016 period)
(with the best knowledge we have on April-2014)

8. Start the construction of the first two BLs in 2015
9. Start the construction of two additional BLs in 2016

As today, these four BLs will be funded:

50% from structural funds (period 2014-2020)

50% from shareholders additional contributions

(¼ MINECO and ¼ Generalitat)

General – Details about Phase III procedure

Workshop for presenting proposals for ALBA phase III beamlines

Thursday, 10th of April 2014,
Auditorio Maxwell de ALBA
Address: Carretera BP1413 Km 3.3, Cerdanyola del Vallès, Barcelona

AGENDA

09:00	*Registration*	
9:30	Welcome	C. Biscari
9:40	Introduction, including instrument development and innovation beamline	M.A.G. Aranda
10:00	Microfocus diffraction beamline for macromolecular crystallography	Maria Solà, Jeronimo Bravo
10:30	Surface-interface diffraction beamline	Xavier Torrelles
11:00	*Coffee break*	
11:30	Energy and polarization dependent scattering beamline	Joaquin García Ruiz
12:00	High-energy imaging beamline	Juan Gómez Barreiro, Federico Sket
12:30	Microfocus diffraction beamline for medium size molecules	Fernando Lahoz
13:00	Submicrometer-beam diffraction, fluorescence and absorption beamline	Adela Muñoz
13:30	*Lunch*	
15:00	Powder diffraction and absorption beamline	Francois Fauth
15:30	Skiron: Chiroptical spectroscopy beamline	Salvador Ferrer
16:00	Biomedical beamline: imaging and therapy	Silvia Gil
16:30	Final general discussion and summary	C. Biscari, M.A.G. Aranda
17:30	*Departure*	

13, de Cerdanyola del Vallès a Sant Cugat del Vallès, Km. 3,3 08290 Cerdanyola del Vallès, (Barcelona) Spain. Tel.:(+34) 93 592 43 00 - Fax (+34) 93 592 43 01 - www.cells.es

10 BL proposals presented

Only 9 will be considered for funding within ALBA phase III.

Powder diffraction and absorption
BL is proposed as it is of high interest for some countries (PBL-type).
In fact we have scheduled a workshop with Turkish colleagues on 7th of July, 2014.

General – Details about Phase III procedure

The nine beamlines are
(in no particular order, approx. names):

1. Microfocus diffraction beamline for macromolecular crystallography BL.
2. Surface-interface diffraction BL.
3. Energy and polarization dependent scattering BL.
4. High-energy imaging BL
5. Microfocus diffraction BL for medium size molecules.
6. Submicrometer-beam diffraction, fluorescence and absorption BL.
7. Biomedical BL: imaging and therapy.
8. *Skiron: Chiroptical spectroscopy BL.*
9. *Instrument development & innovation BL - no users oriented.*

- ALBA will nominate a co-spokesperson for the preselected BLs in order to help in the proposals (mainly but not only) for the technical and budgetary parts.
- Proposals not included in the above list can still present their projects to SAC by September

Details about Phase III procedure

Mail announcing the workshop: criteria for prioritizing BL proposals

Workshop:

For each phase-III beamline proposal a presentation is expected including: I) Person or group of at most three persons, who would lead the proposal in case it was pre-selected; II) User groups supporting the proposal; III) Preliminary brief scientific case; IV) Connection between the scientific case and the priority lines of Horizon 2020; V) Possible synergies with the techniques and human resources currently available at ALBA; VI) Possible returns of the beamline investment to society (commercial use, regional development, …); VII) Any other relevant features.

Name-BL	Scientific case interest	Return to society[#]	Social impact[$]	User support	ALBA / Bellaterra synergy	Horizon 2020 synergy	Any other parameter[%]	Spokesperson(s) involvement
Microfocus-MX								
Microfocus-XANES								
Microfocus-SCD								
High-energy-tomography								
Surface-diffraction								
E-P-scattering								
Biomedical BL								
Instrument development								
Skiron								
HRPD-XAS								

[#] *Economic impact: industrial use, regional/local technological development, …*

[$] *Importance of the scientific case for tackling current society problems; ALBA visibility in the media; outreach possibilities…*

[%] *To be properly justified.*

Thank you

For your involvement with ALBA

For your assistance to the workshop