



| The European Synchrotron

A beginner's guide to ESRF

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- **History**
- **Member countries**
- **Number of beamlines**
- **Uptime and 24/7 operation**
- **Number of visitors**
- **ESRF-EBS**



- The ESRF 1988 convention
 - 11 countries signed in Paris
- 1992 – First Users
- 1998 – 40 beamlines
- 2009-2015:
 - Upgrade Programme Phase I (180M€)
- 2015-2022:
 - Upgrade Programme Phase II (150M€) called EBS

MEMBER STATES



27.5% France
24% Germany
13.2% Italy
10.5% United Kingdom
6% Russia
4% Spain
4% Switzerland
5.8% Benesync
5.0% Nordsync



1.5% Israel
1.3% Austria
1% Poland
1% Portugal
1.05% Centralsync
0.66% India
0.3% South Africa

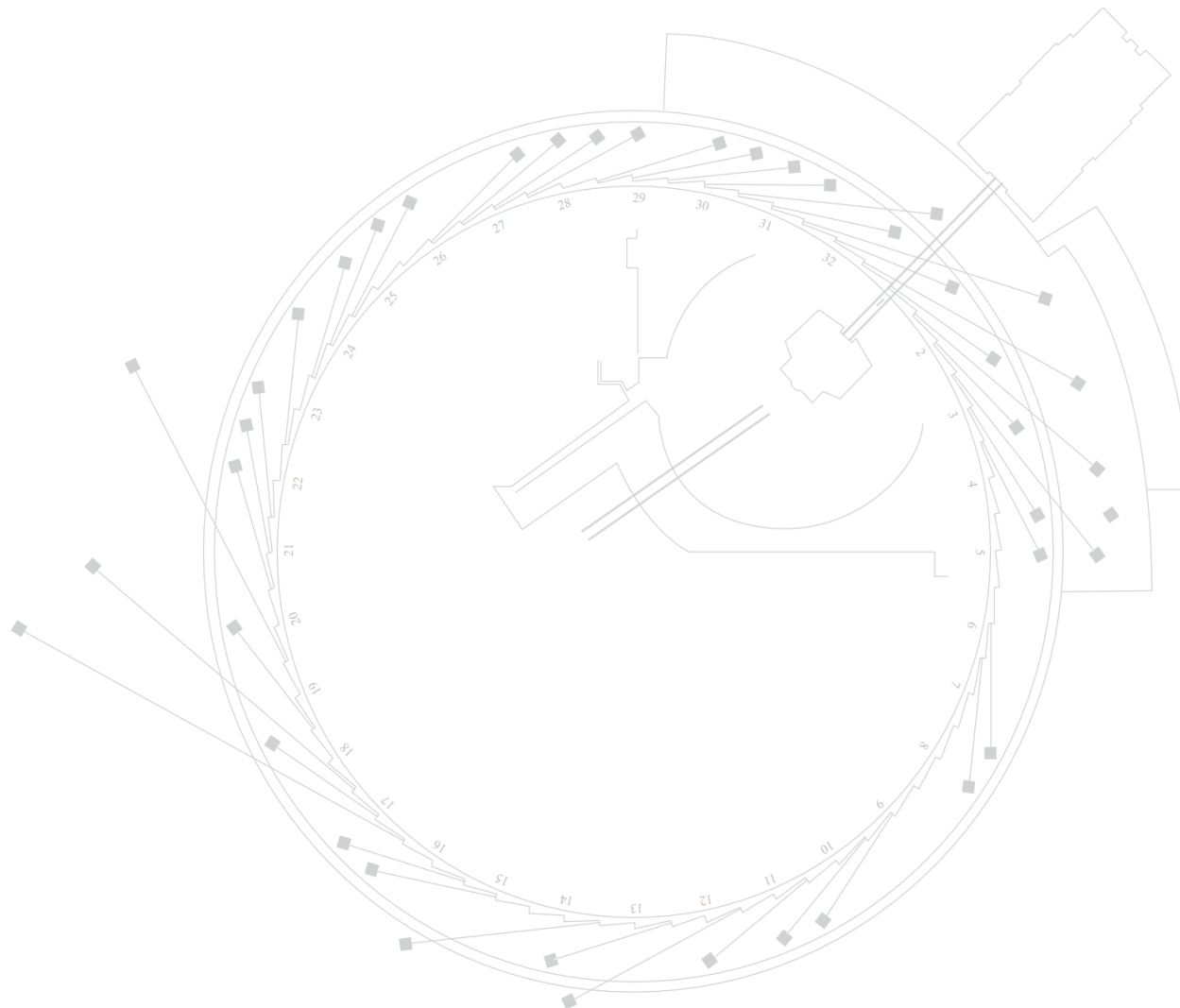


- **43 beamlines**
 - 11 CRG beamlines
 - 28 ESRF Beamlines
 - 4 test beamlines
- **3 long beamlines**
 - ID17 – biomedical
 - ID19 – microtomography
 - ID16 – nanobeamline(s)

BEAMLINES ON OUR WEB

BY BEAMLINE

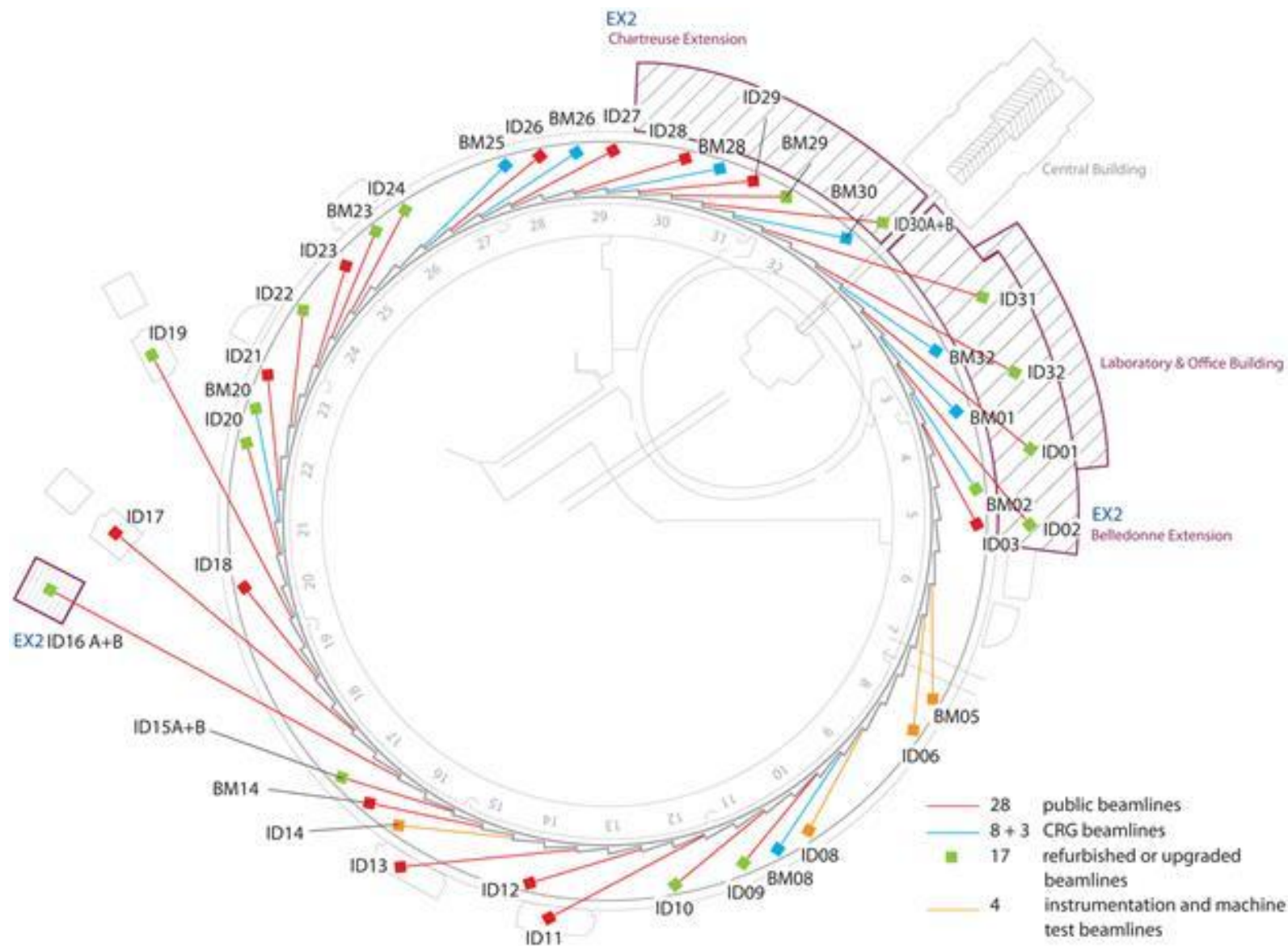
ID01	ID20	BM01
ID02	ID21	BM02
ID03	ID22	BM05
ID06	ID23-1	BM08
ID06LVP	ID23-2	BM16
ID09	ID24	BM20
ID10	ID26	BM23
ID11	ID27	BM25
ID12	ID28	BM26
ID13	ID29	BM28
ID15A	ID30A-1	BM29
ID15B	ID30A-2	BM30A
ID16A	ID30A-3	BM30B
ID16B	ID30B	BM31
ID17	ID31	BM32
ID18	ID32	CM01
ID19		





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ESRF WITH DIFFERENT BEAMLINES





- **43 beamlines**
 - 11 CRG beamlines
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 - 4 test beamlines
- **3 long beamlines**
 - ID17 – biomedical
 - ID19 – microtomography
 - ID16 – nanobeamline(s)

UPTIME AND SCHEDULES

Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017
Sun 01 s s s	Wed 01	Wed 01	Sat 01 m m m	Mon 01	Thu 01 s s s	Sat 01	Tue 01 s s s	Fri 01	Sun 01	Wed 01	Fri 01
Mon 02 s s s	Thu 02	Thu 02	Sun 02 m m m	Tue 02 m m m	Fri 02 s s s	Sun 02	Wed 02 s s s	Sat 02	Mon 02	Thu 02	Sat 02
Tue 03 s s s	Fri 03	Fri 03	Mon 03 m m m	Wed 03	Sat 03 s s s	Mon 03	Thu 03 s s s	Sun 03	Tue 03	Fri 03	Sun 03
Wed 04 s s s	Sat 04	Sat 04	Tue 04	Thu 04	Sun 04 s s s	Tue 04 m m m	Fri 04 s s s	Mon 04 m m m	Wed 04 s s s	Sat 04	Mon 04
Thu 05 s s s	Sun 05	Sun 05	Wed 05	Fri 05	Mon 05 s s s	Wed 05	Sat 05 s s s	Tue 05	Thu 05 s s s	Sun 05	Tue 05
Fri 06 s s s	Mon 06	Mon 06	Thu 06	Sat 06	Tue 06 s s s	Thu 06	Sun 06 s s s	Wed 06	Fri 06 s s s	Mon 06	Wed 06 m m m
Sat 07 s s s	Tue 07 m m m	Tue 07	Fri 07	Sun 07	Wed 07 s s s	Fri 07	Mon 07 s s s	Thu 07	Sat 07 s s s	Tue 07 m m m	Thu 07
Sun 08 s s s	Wed 08 m m m	Wed 08 m m m	Sat 08	Mon 08	Thu 08 s s s	Sat 08	Tue 08 s s s	Fri 08	Sun 08 s s s	Wed 08	Fri 08
Mon 09 s s s	Thu 09	Thu 09	Sun 09	Tue 09 m m m	Fri 09 m m m	Sun 09	Wed 09 s s s	Sat 09	Mon 09 s s s	Thu 09	Sat 09
Tue 10 s s s	Fri 10	Fri 10	Mon 10	Wed 10	Sat 10 m m m	Mon 10	Thu 10 s s s	Sun 10	Tue 10 s s s	Fri 10	Sun 10
Wed 11 s s s	Sat 11	Sat 11	Tue 11 m m m	Thu 11	Sun 11 m m m	Tue 11 m m m	Fri 11 s s s	Mon 11	Wed 11 s s s	Sat 11	Mon 11
Thu 12 s s s	Sun 12	Sun 12	Wed 12	Fri 12	Mon 12 m m m	Wed 12	Sat 12 s s s	Tue 12 m m m	Thu 12 s s s	Sun 12	Tue 12
Fri 13 s s s	Mon 13	Mon 13	Thu 13	Sat 13	Tue 13	Thu 13	Sun 13 s s s	Wed 13	Fri 13 m m m	Mon 13	Wed 13
Sat 14 s s s	Tue 14 m m m	Tue 14	Fri 14	Sun 14	Wed 14	Fri 14	Mon 14 s s s	Thu 14	Sat 14 m m m	Tue 14 m m m	Thu 14
Sun 15 s s s	Wed 15	Wed 15 m m m	Sat 15	Mon 15	Thu 15	Sat 15	Tue 15 s s s	Fri 15	Sun 15 m m m	Wed 15	Fri 15
Mon 16 s s s	Thu 16	Thu 16	Sun 16	Tue 16 m m m	Fri 16	Sun 16	Wed 16 s s s	Sat 16	Mon 16 m m m	Thu 16	Sat 16
Tue 17 s s s	Fri 17	Fri 17	Mon 17	Wed 17	Sat 17	Mon 17	Thu 17 s s s	Sun 17	Tue 17	Fri 17	Sun 17
Wed 18 s s s	Sat 18	Sat 18	Tue 18 m m m	Thu 18	Sun 18	Tue 18 m m m	Fri 18 m m m	Mon 18	Wed 18	Sat 18	Mon 18 s s s
Thu 19 s s s	Sun 19	Sun 19	Wed 19	Fri 19	Mon 19	Wed 19	Sat 19 m m m	Tue 19 m m m	Thu 19	Sun 19	Tue 19 s s s
Fri 20 m m m	Mon 20	Mon 20	Thu 20	Sat 20	Tue 20 m m m	Thu 20	Sun 20 m m m	Wed 20	Fri 20	Mon 20	Wed 20 s s s
Sat 21 m m m	Tue 21 m m m	Tue 21	Fri 21	Sun 21	Wed 21	Fri 21	Mon 21 m m m	Thu 21	Sat 21	Tue 21 m m m	Thu 21 s s s
Sun 22 m m m	Wed 22	Wed 22 s s s	Sat 22	Mon 22	Thu 22	Sat 22	Tue 22	Fri 22	Sun 22	Wed 22	Fri 22 s s s
Mon 23 m m m	Thu 23	Thu 23 s s s	Sun 23	Tue 23 m m m	Fri 23	Sun 23	Wed 23	Sat 23	Mon 23	Thu 23	Sat 23 s s s
Tue 24	Fri 24	Fri 24 s s s	Mon 24	Wed 24	Sat 24	Mon 24	Thu 24	Sun 24	Tue 24	Fri 24	Sun 24 s s s
Wed 25	Sat 25	Sat 25 s s s	Tue 25 m m m	Thu 25	Sun 25	Tue 25	Fri 25	Mon 25	Wed 25	Sat 25	Mon 25 s s s
Thu 26	Sun 26	Sun 26 s s s	Wed 26	Fri 26	Mon 26	Wed 26 s s s	Sat 26	Tue 26 m m m	Thu 26	Sun 26	Tue 26 s s s
Fri 27	Mon 27	Mon 27 s s s	Thu 27	Sat 27	Tue 27 m m m	Thu 27 s s s	Sun 27	Wed 27	Fri 27	Mon 27	Wed 27 s s s
Sat 28	Tue 28 m m m	Tue 28 s s s	Fri 28	Sun 28	Wed 28	Fri 28 s s s	Mon 28	Thu 28	Sat 28	Tue 28 m m m	Thu 28 s s s
Sun 29		Wed 29 s s s	Sat 29	Mon 29	Thu 29	Sat 29 s s s	Tue 29 m m m	Fri 29	Sun 29	Wed 29	Fri 29 s s s
Mon 30		Thu 30 s s s	Sun 30	Tue 30	Fri 30	Sun 30 s s s	Wed 30	Sat 30	Mon 30	Thu 30	Sat 30 s s s
Tue 31 m m m		Fri 31 m m m		Wed 31 s s s		Mon 31 s s s	Thu 31		Tue 31 m m m		Sun 31 s s s

NUMBER OF VISITORS AND SUBMITTED

Scientific field	Total shifts requested	Total shifts allocated
Chemistry	4 059	1 895
Earth Sciences	1 722	845
Environment	680	306
Hard Condensed Matter Science	8 395	3 360
Cultural Heritage	364	198
Life Sciences	1 029	465
Applied Materials Science	4 929	1 706
Medicine	927	553
Engineering	276	72
Methods & Instrumentation	259	174
Structural Biology	2 809	2 678
Soft Condensed Matter	2 445	959
Totals	27 894	13 211

2015 manpower (posts filled on 31/12/2015)

	Scientists, Engineers, Senior Administrators	Technicians and Administrative Staff	PhD Students	Total
Staff on regular positions				
Accelerator and Source*	38	45		83
Beamlines, instruments and experiments*	236	91	27	354
General technical services	32	54		86
Directorate, administration and central services	42	55		97
<i>Sub-total</i>	<i>348</i>	<i>245</i>	<i>27</i>	<i>620</i>
Other positions				
Short term contracts	7	9		16
Staff under "contrats de professionnalisation"		35		35
Total	355	289	27	671
<i>Scientific collaborators and consultants</i>	<i>8</i>			<i>8</i>



- Design started Jan 2015
- Brightness by factor 30
- 30% less energy needed
- Last users Dec 2018
- First EBS users Sep 2020
 - Dismantle old:
Jan – May 2019
 - Installing new:
Apr – Dec 2019
 - Commissioning:
Dec 2019 – Aug 2020

QUESTIONS?



**THANKS
FOR
LISTENING**



Thanks for listening!

Any Questions?