

Motivation

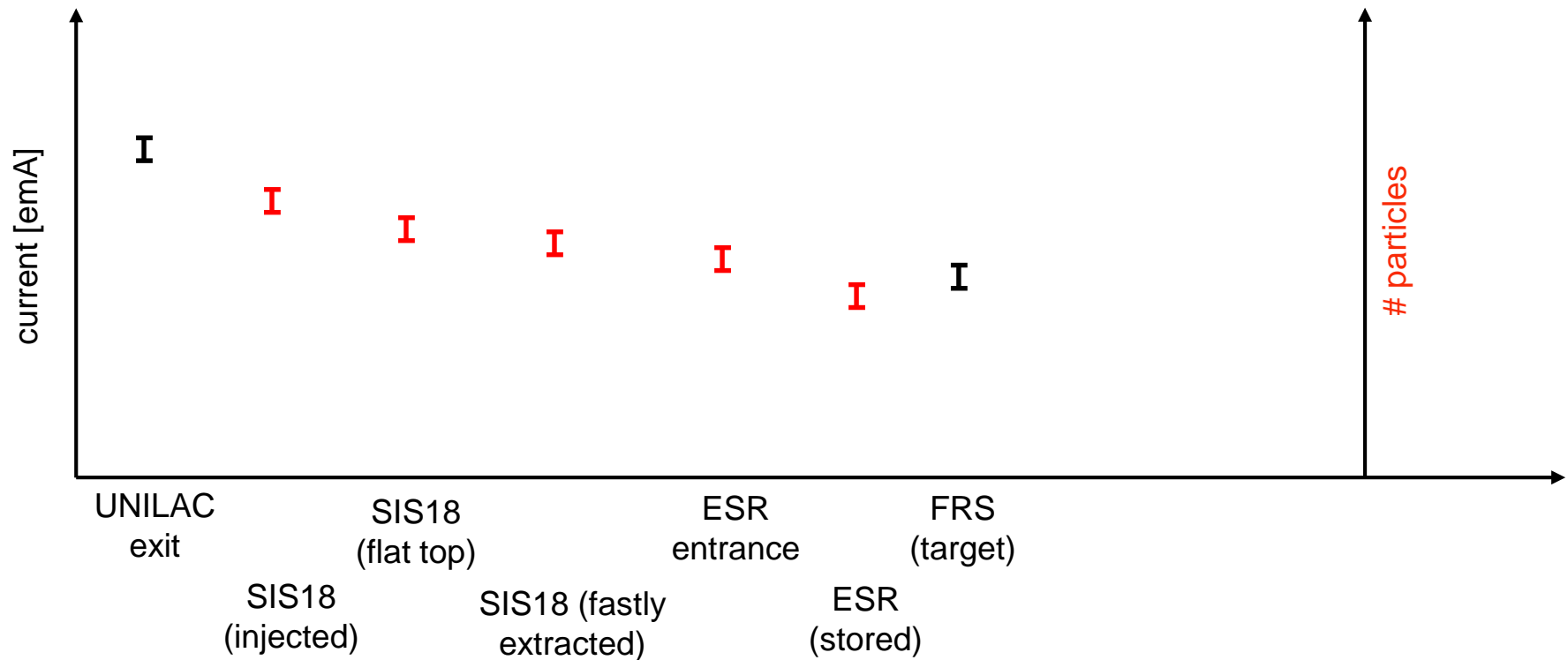
- GSI shall report the status on what has been really achieved at existing facilities w.r.t. beam parameters
- essential content of measured-parameters list: what parameter, where, when
→ parameter, nomenclature of device, date & time
- preferred: data that was stored in and is retrievable from log files (transmissions, emittances, profiles, ...), i.e., location- and time-stamped data files available from CS

Data collection

- AccOp head asked LG to inquire these data from the MKs
- Template table has been agreed and sent out
- Query is initially restricted to data related to uranium FAIR reference, i.e., :
 - source: $^{238}\text{U}^{4+}$
 - post-stripper: 28+
 - SIS18: 28+
 - ESR: whatever

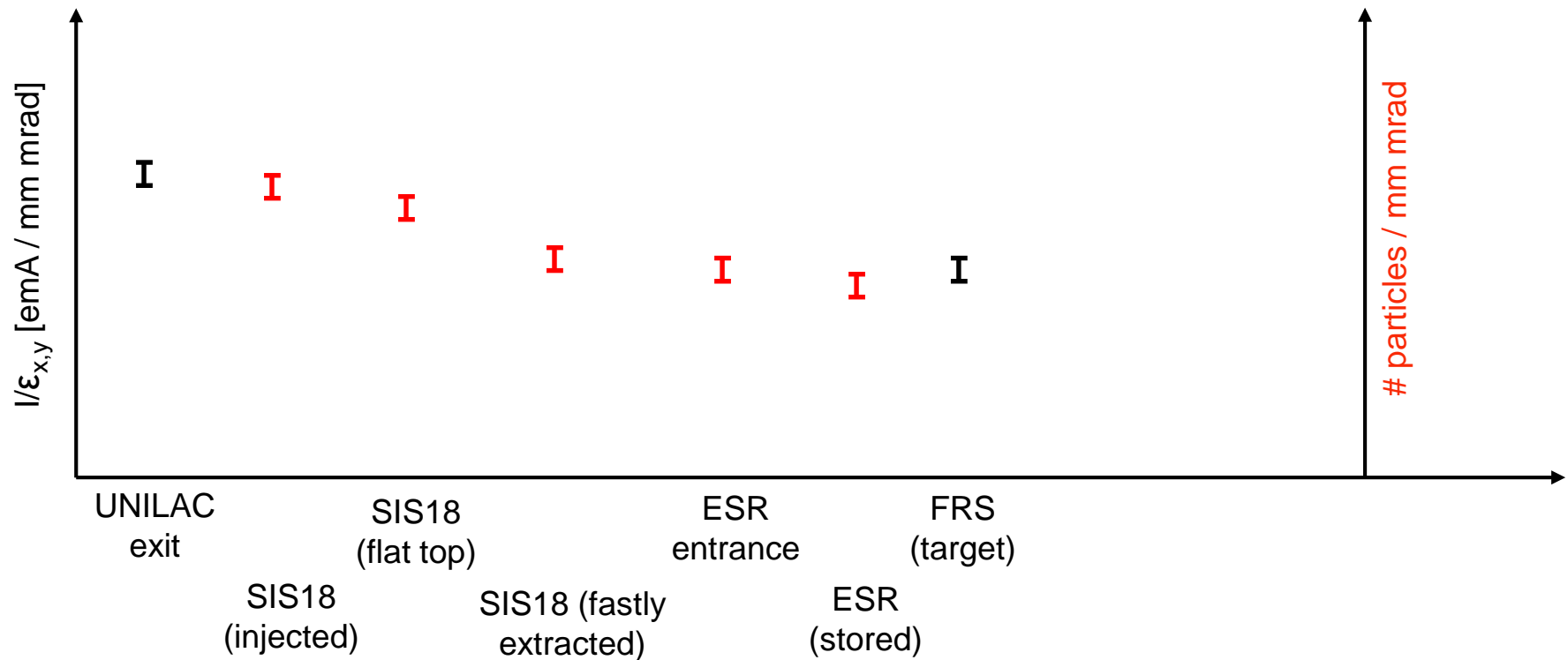
Goal

GSI shall provide figures on measured intensities ...



Goal

... and achieved brilliances (intensity per emittance)



... from feed back received so far ...

1 UNILAC exit

$I = 4.3 \text{ emA}$
 $\epsilon_{x/y} = 0.15/0.16 \text{ } \mu\text{m}$
 $B_{x/y} = 29/27 \text{ emA}/\mu\text{m}$
 July 21st, 2016, 02:00

4 SIS (fastly extr.)

$N = 2 \cdot 10^{11} \text{ (}^{x}Y^{z+}\text{)}$
 $\epsilon_{x/y} = \dots \text{ } \mu\text{m}$
 $B_{x/y} = \dots \text{ emA}/\mu\text{m}$
 XX yyst, zzzz, ab:cd

2 SIS (injected)

$N = \dots$
 $\epsilon_{x/y} = \dots \text{ } \mu\text{m}$
 $B_{x/y} = \dots \text{ emA}/\mu\text{m}$
 XX yyst, 20xx, ab:cd

5 ESR (entrance)

$N = \dots$
 $\epsilon_{x/y} = \dots \text{ } \mu\text{m}$
 $B_{x/y} = \dots \text{ emA}/\mu\text{m}$
 XX yyst, zzzz, ab:cd

3 SIS (flat top)

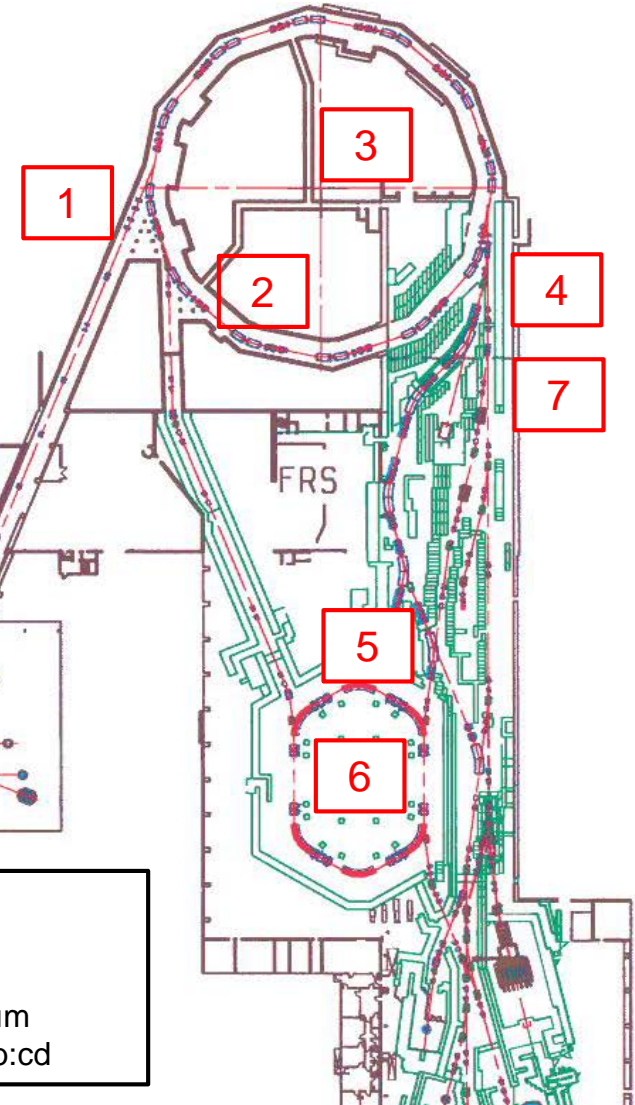
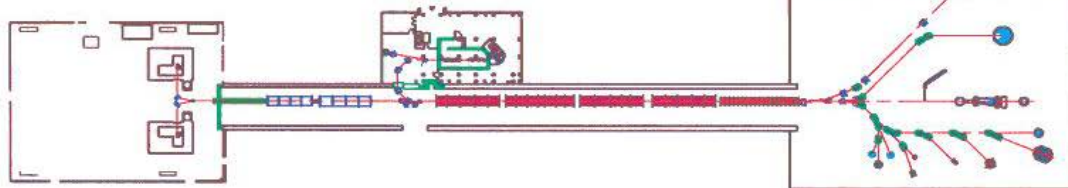
$N = 3.5 \cdot 10^{10}$
 $\epsilon_{x/y} = \dots \text{ } \mu\text{m}$
 $B_{x/y} = \dots \text{ emA}/\mu\text{m}$
 XX yyst, 2012, ab:cd

6 ESR (stored)

$N = 1 \cdot 10^8 \text{ (}^{U92+}\text{)}$
 $\epsilon_{x/y} = \dots \text{ } \mu\text{m}$
 $B_{x/y} = \dots \text{ emA}/\mu\text{m}$
 XX yyst, 20xx, ab:cd

7 FRS (target)

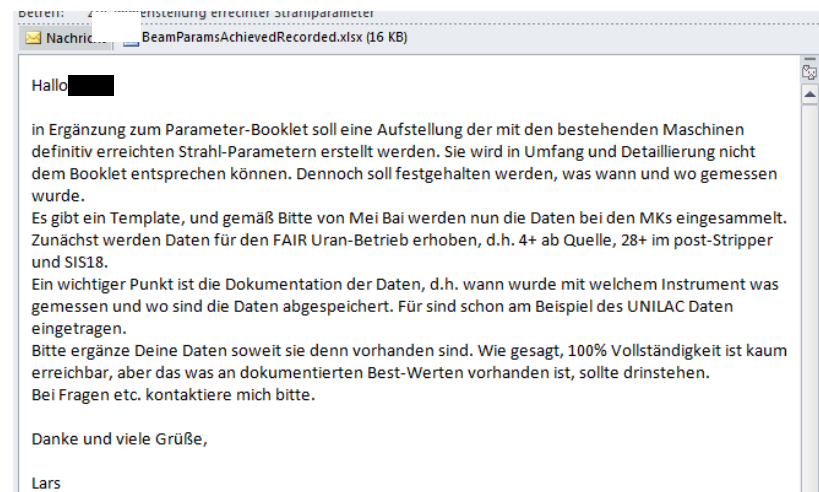
$N = \dots$
 $\epsilon_{x/y} = \dots \text{ } \mu\text{m}$
 $B_{x/y} = \dots \text{ emA}/\mu\text{m}$
 XX yyst, zzz, ab:cd



requests & feed back ...

- requests & template (and reminders) were sent on May 5th, May 22nd, July 2nd
- response was given from PSU and ESR

	Energy [MeV/u]	Intensity lines -> current [emA] rings -> # particles	norm. hor. rms-emit	norm. ver. rms-emit	rms-bunch length	rel. rms-mom. spread [%]
Location (rough)						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						
post-stripper exit						
5.9(1)	5.1(5)	0.15(1)	0.21(2)	not meas.	not meas.	
Location (Nomenclature)						
A4DP4X:TIDP0X UA4DE4... ..x ..y						
datetime of record						
20160721 00:07 20160721 03:... ..09:23 ..19:36						
raw data stored g/h						
n y y y						
UNILAC exit						
5.9(1)	4.3(4)	0.15(1)	0.16(2)	not meas.	not meas.	
Location (Nomenclature)						
TK5DE4... ..x ..y						
datetime of record						
20160721 03:... ..34:30 ..44:10						
raw data stored g/h						
n y y y						
SIS 18 (injected)						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						
SIS18 (flat top)						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						
SIS18 (fastly extracted)						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						
ESR entrance						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						
ESR (stored)						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						
FRS target						
Location (Nomenclature)						
datetime of record						
raw data stored g/h						



further procedure

as “editor concluded response unlikely” the further procedure was agreed as:

- missing data will be filled by data found on web pages during next days
- table filled this way will be presented to TGF soon