



# HL-LHC WP8 Planning, overview of activities



# TAXS- Region



## LAYOUT OPEN POINTS

BPM position

Services for the vacuum system

Alignment

Prototype- (proof of principle) by end 2016.



## CMS- OPEN POINTS

Services for the vacuum system:

- Two pumping lines dia 50mm, bakeable (?)
- Instrument and power cables for station at  $z=17\text{m}$
- Instrument and power cables for station at  $z=15.5\text{m}$  (presently at  $z=13.5\text{m}$ )

Alignment of the vacuum pipe.

Beam background effects of the new layout.

Activation of the vacuum components and impact on nearby activities.

*A. Gaddi, 29<sup>th</sup> WP8*



# TAXS



## ATLAS- OPEN POINTS

Services are too big at some locations (Big wheel TGC3 washers).  
Study services for VT and VJ (LUCID)

Definition of clearances when opening JFC2. Lifting tool

Alignment of the BPM.

Beam background effects of the new layout. (ATLAS)  
Radiation analysis (ATLAS)

*M. Raymond, 28<sup>th</sup> WP8*



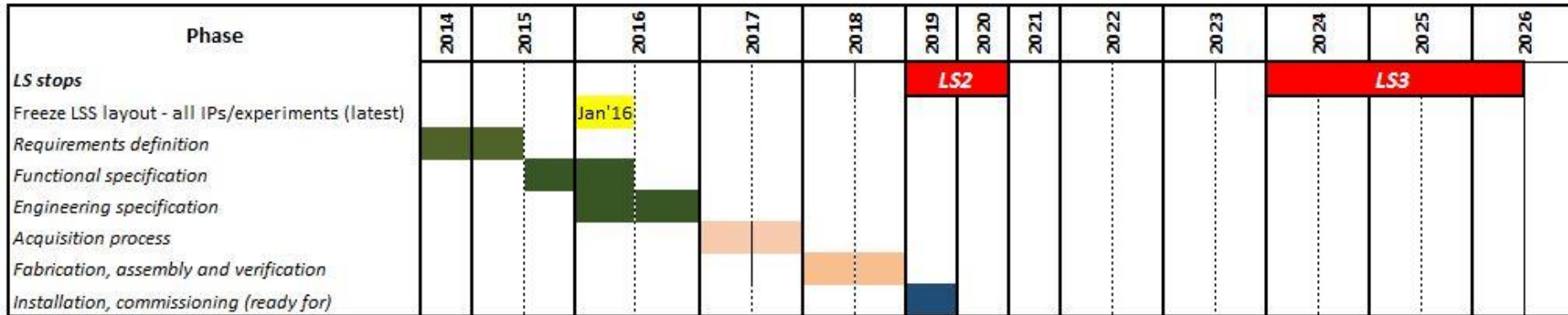
# TAXS



Decision from experiments  
ECR's

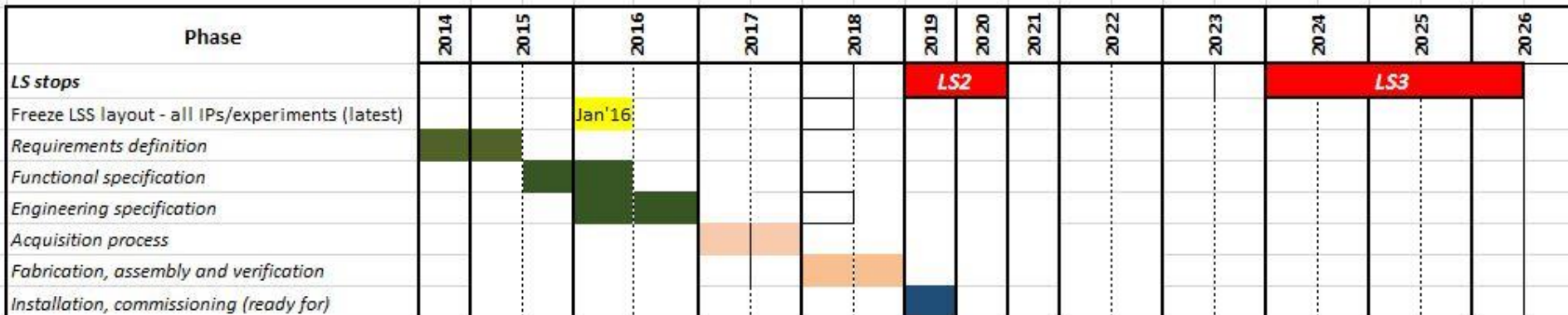


Timeline for the TAXN IP8 baseline scenario - installation during LS2.



Last update: January 12, 2016

Timeline for the TCDDM IP8 baseline scenario - installation during LS2.



Last update: January 12, 2016

# WP8 activities @ P8 Timeline



17%	▸ LHCb Target Absorber For Insertion Region Neutral [TAXN]	1305 days	Mon 18/08/14	Fri 25/10/19
100%	▸ Conceptual stage	240 days	Mon 18/08/14	Fri 31/07/15
100%	Conceptual specification approval	12 mons	Mon 18/08/14	Fri 31/07/15
0%	▸ Development stage	380 days	Mon 03/08/15	Fri 10/02/17
0%	▸ Functional specification	220 days	Mon 03/08/15	Fri 17/06/16
0%	Functional specification	11 mons	Mon 03/08/15	Fri 17/06/16
0%	Design and schedule review	5 days	Mon 25/04/16	Fri 29/04/16
0%	▸ Engineering spec	160 days	Mon 20/06/16	Fri 10/02/17
0%	Global engineering specifications	8 mons	Mon 20/06/16	Fri 10/02/17
0%	Design file	6 mons	Mon 20/06/16	Fri 02/12/16
0%	Engineering Design and schedule review	5 days	Mon 05/12/16	Fri 09/12/16
0%	▸ Acquisition process	255 days	Mon 13/02/17	Fri 16/02/18
0%	Buy or made decision	5 days	Mon 13/02/17	Fri 17/02/17
0%	Announcement	5 days	Mon 20/02/17	Fri 24/02/17
0%	Market Survey	60 days	Mon 27/02/17	Fri 19/05/17
0%	Invitation to Tender	95 days	Mon 22/05/17	Fri 29/09/17
0%	CSD (Contract starting date)	0 days	Fri 16/02/18	Fri 16/02/18
0%	▸ FAV process	340 days	Mon 19/02/18	Mon 24/06/19
0%	Fabrication, Assembly & verification	14 mons	Mon 19/02/18	Fri 29/03/19
0%	Storage up to installation	3 mons	Mon 01/04/19	Mon 24/06/19
0%	▸ Installation-Commissioning	150 days	Mon 01/04/19	Fri 25/10/19
0%	TAN dismounting	2 mons	Mon 01/04/19	Fri 24/05/19
0%	TAXN installation	2 mons	Mon 24/06/19	Fri 16/08/19
0%	TAXN comissioning	40 days	Mon 02/09/19	Fri 25/10/19



**TAXN**



## **OPEN POINTS**

Integration of TCDDM in the LHC layout

Compatibility with BRAN

Compatibility with transport (size, weight < 10 ton)

Operations in BRAN (Remote handling?).