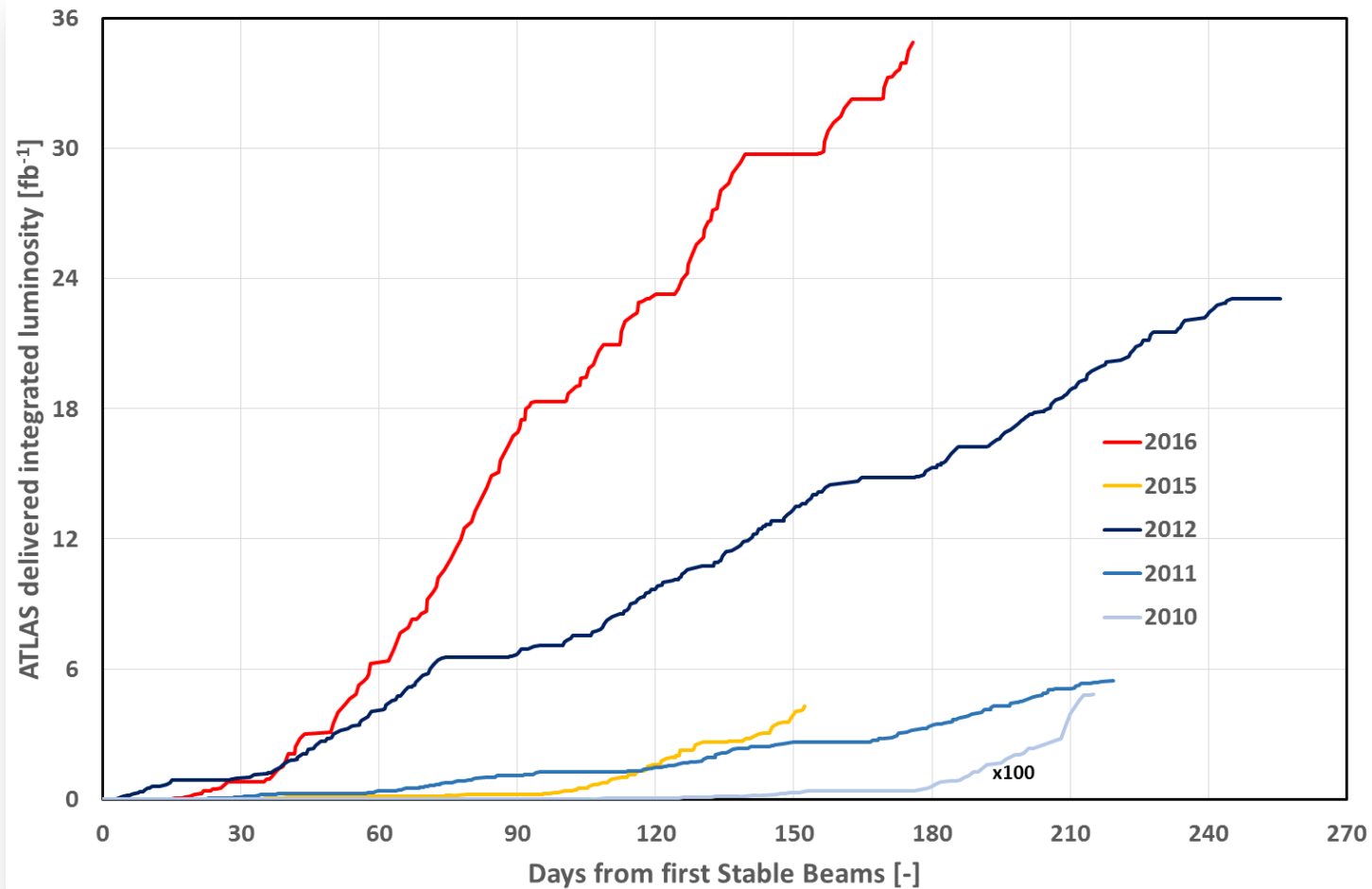


LHC STATUS @ PLANS

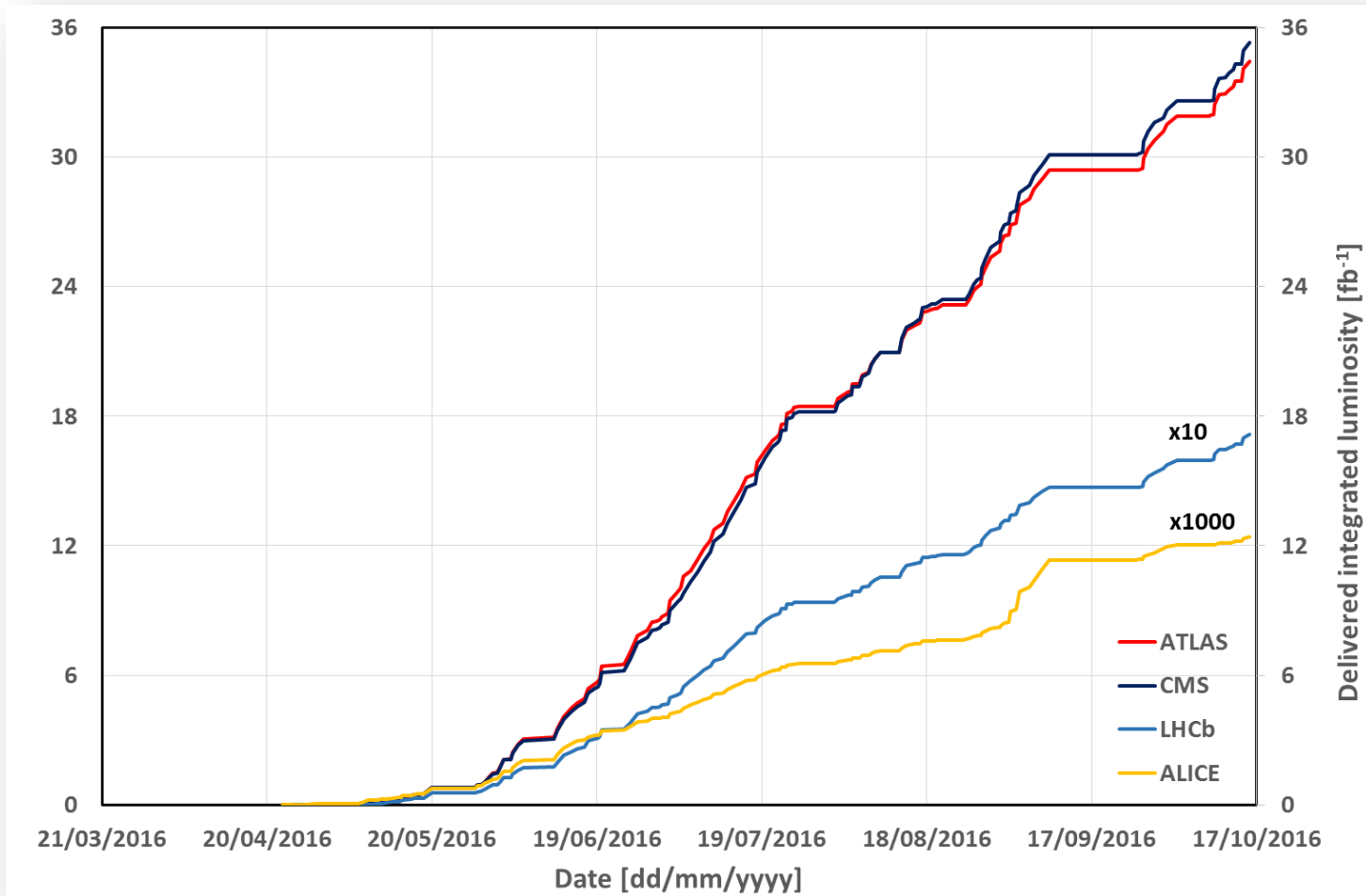
LHC
operation
in RUN2

6.5 TeV + 6.5 TeV

Интегральная светимость в ATLAS



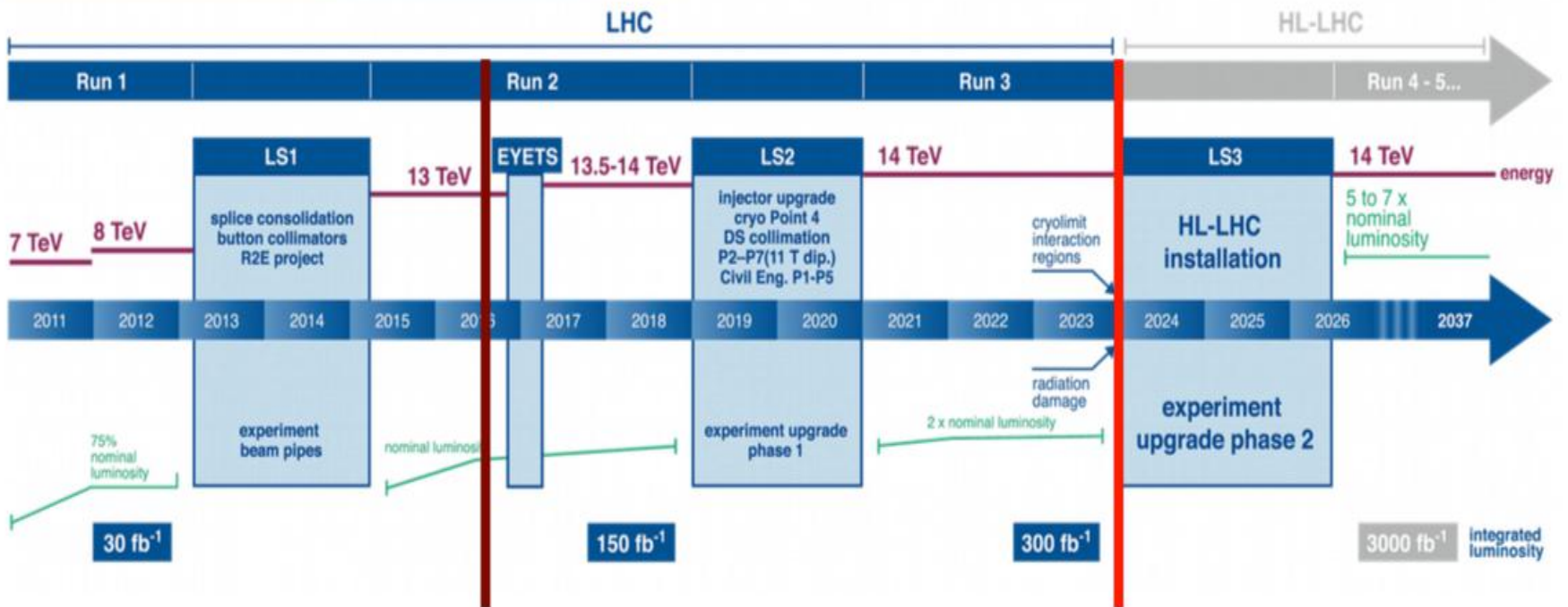
Интегральная светимость в ATLAS, CMS, LHCb, ALICE



Проектные и достигнутые параметры LHC

Parameters	Design	Run I	2015	2016
Proton energy [TeV]	7	3.5-4	6.5	6.5
Bunch spacing [ns]	25	50	25	25
# proton per bunch [10^{11}]	1.15	1.5-1.7	1.2	1.15
Number of bunches	2808	1374	2244	2220
Transverse norm. emittance [mm mrad]	3.75	2.5	3.5	2
Stored energy per beam [MJ]	362	140	270	260
Crossing angle [mrad]	142.5	145	145	185→ 140
β^* in IP1 and IP5 [cm]	55	60	80	40
Peak luminosity in IP1 and IP5 [$10^{34} \text{ cm}^{-2} \text{ s}^{-1}$]	1.0	0.77	0.5	1.4
Pile-up IP1 and IP5	19	37	16	45

LHC / HL-LHC Plan



ОФВЭ in UPGRADE

Контракты с Министерством образования и науки

- 2014-2016 128 млн.руб
CMS, ATLAS, LHCb, ALICE
- 2017-2019 стадия согласования проектов