

BST use in experiments

Feedback from ALICE, ATLAS, CMS,
LHCb

Main Usage

- UTC time and beam related information (Orbit number) directly inserted to the event data of experiments (with source and identity information) - *CMS, LHCb, ALICE*
- Injection pre-pulse, occasionally - *LHCb, ALICE*
- Beam mode for
 - cross-checking DIP - *All experiments*
 - Automatic switching of TTC experiments bunch clock (between LHC Bunch Clock and an internal source): *foreseen in TTC hardware, but finally managed by software using DIP for more flexibility*

Feedback on BST

- « The BST system provides a very convenient method of receiving these beam-related data as the number of components needed to implement the receiver is minimal, by comparison to say, the GMT system. » CMS
- « The BST system is a very useful interface between experiment and machine and we intend to use it in the future as well, or what ever alternative is prepared in the machine upgrade program. » LHCb
- « We only use the BST system for monitoring/cross-checking purpose, so if all of a sudden BST would disappear, we would not cry... But if it stays or changes, we would probably still want to receive the signals, one never knows when they could become useful. » (..) ATLAS

Future...

- Many paths of exchanging information between LHC and experiments exist for the moment (BST, GMT, DIP, ...). Each experiment found its own way to use them.
- Since the LEADE or LPC committees do not exist anymore, we feel a strong need from the experiments to know better how the informations will be exchanged between LHC and experiments in the future, and to take part on discussions on the subject.