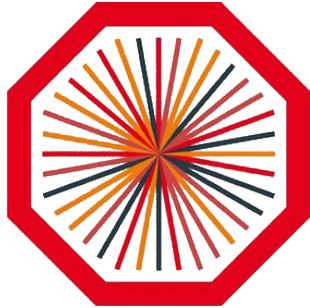
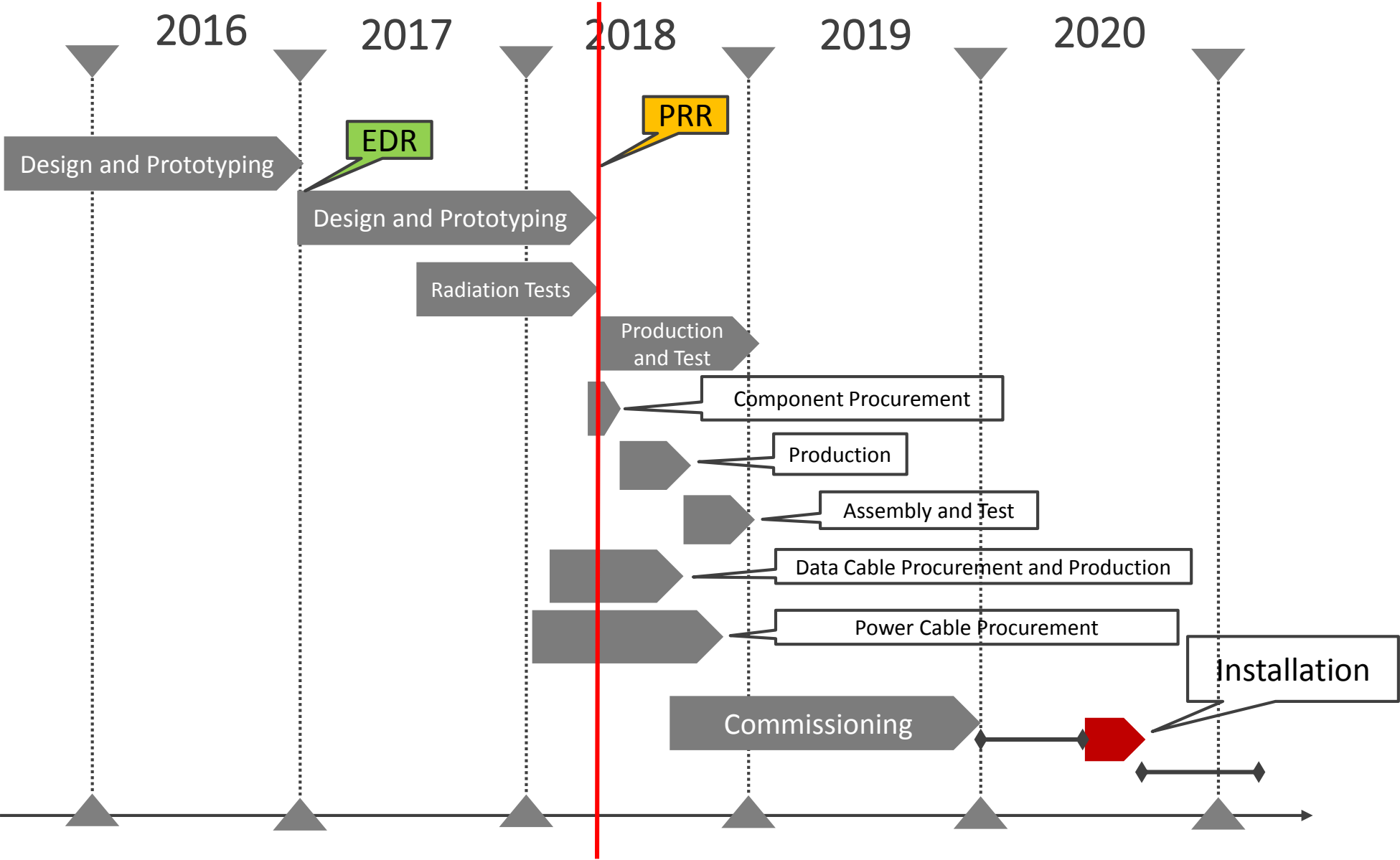


# ALICE



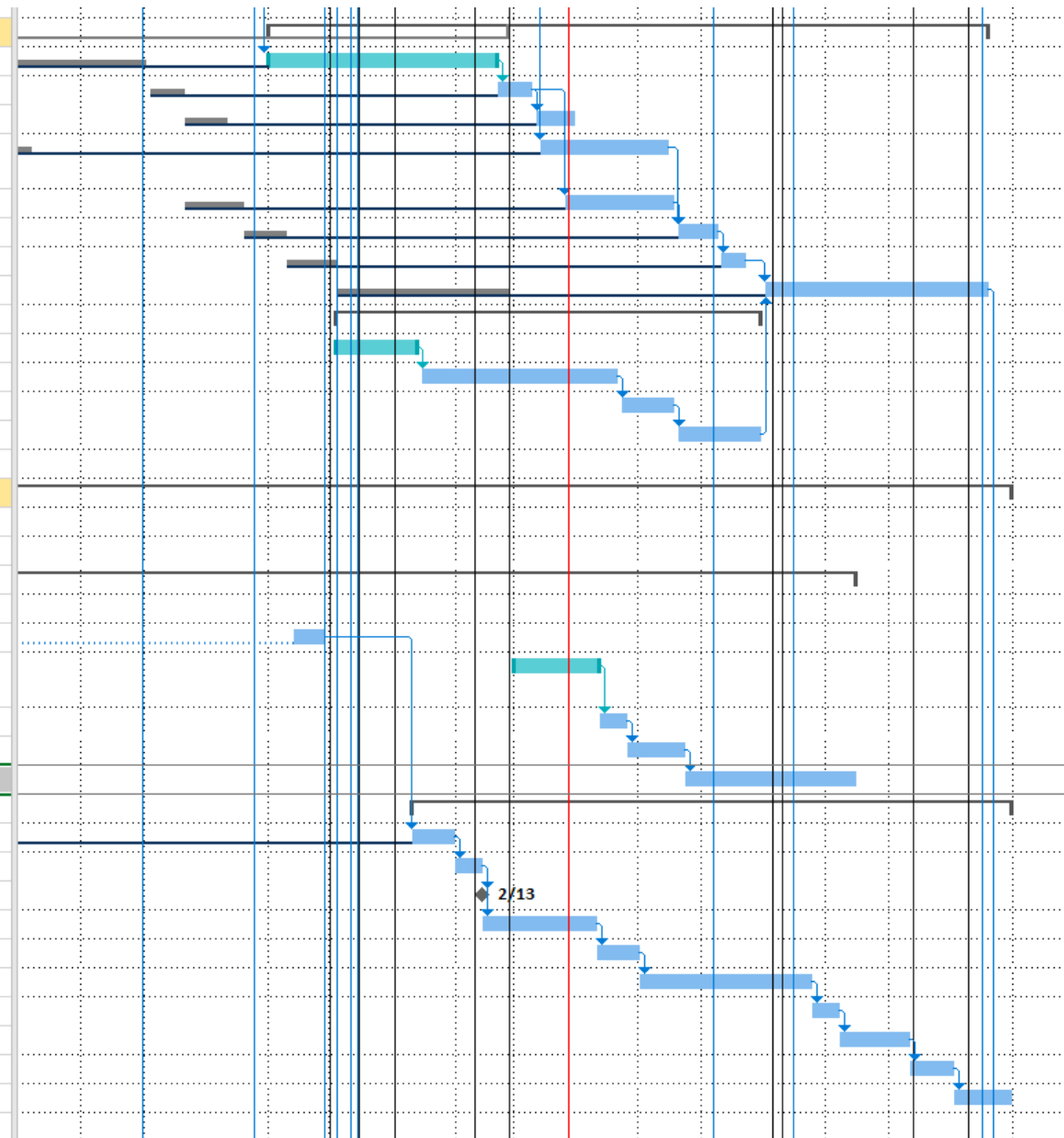
## Quick planning overview

# Planning – High level overview



# Planning – Detailed Gantt chart

|     |   |  |           |             |              |               |
|-----|---|--|-----------|-------------|--------------|---------------|
| 560 | 🔧 | ▸ RUv2 (Final)   | 253 days? | Wed 11/1/17 | Fri 10/19/18 |               |
| 561 | 🔧 | Bug fix and design changes                               | 80 days   | Wed 11/1/17 | Tue 2/20/18  | 555           |
| 562 | 🔧 | Schematic review   | 13 days   | Wed 2/21/18 | Fri 3/9/18   | 561           |
| 563 | 🔧 | Layout review  | 15 days   | Mon 3/12/18 | Fri 3/30/18  | 562           |
| 564 | 🔧 | RUv2 Components procurements (FPGA, GBT, key components) | 45 days   | Wed 3/14/18 | Tue 5/15/18  | 554           |
| 565 | 🔧 | Tendering Board Production                               | 40 days   | Mon 3/26/18 | Fri 5/18/18  | 562FS+10 days |
| 566 | 🔧 | Pre production   | 15 days   | Mon 5/21/18 | Fri 6/8/18   | 564,565       |
| 567 | 🔧 | Power-up testing   | 10 days   | Mon 6/11/18 | Fri 6/22/18  | 566           |
| 568 | 🔧 | Full production  | 80 days   | Mon 7/2/18  | Fri 10/19/18 | 567,573       |
| 569 | 🔧 | ▸ Ancillary Board for mass testing                       | 150 days  | Mon 12/4/17 | Fri 6/29/18  |               |
| 570 | 🔧 | Design   | 30 days   | Mon 12/4/17 | Fri 1/12/18  |               |
| 571 | 🔧 | Design review  | 70 days   | Mon 1/15/18 | Fri 4/20/18  | 570           |
| 572 | 🔧 | Production   | 20 days   | Mon 4/23/18 | Fri 5/18/18  | 571           |
| 573 | 🔧 | Review, Test and Finalisation                            | 30 days   | Mon 5/21/18 | Fri 6/29/18  | 572           |
| 574 | 🔧 |  |           |             |              |               |
| 575 | 🔧 | ▸ System integration                                     | 455 days  | Wed 2/1/17  | Tue 10/30/18 |               |
| 576 | 🔧 | Cable PCB connector design                               | 15 days   | Wed 2/1/17  | Tue 2/21/17  |               |
| 577 | 🔧 | General RPU system layout                                | 15 days   | Wed 3/1/17  | Tue 3/21/17  |               |
| 578 | 🔧 | ▸ Data Cable Procurement                                 | 401 days  | Wed 2/1/17  | Wed 8/15/18  |               |
| 579 | 🔧 | Cable safety exception                                   | 30 days   | Wed 2/1/17  | Tue 3/14/17  |               |
| 580 | 🔧 | Cable finalization                                       | 30 days   | Wed 3/22/17 | Tue 11/28/17 | 576,577,579   |
| 581 | 🔧 | Production version prototype procurement                 | 30 days   | Thu 3/1/18  | Wed 4/11/18  |               |
| 582 | 🔧 | Prototype verification (incl mechanics)                  | 10 days   | Thu 4/12/18 | Wed 4/25/18  | 581           |
| 583 | 🔧 | Procurement final production                             | 20 days   | Thu 4/26/18 | Wed 5/23/18  | 582           |
| 584 | 🔧 | Production   | 60 days   | Thu 5/24/18 | Wed 8/15/18  | 583           |
| 585 | 🔧 | ▸ Power Cable Procurement                                | 210 days  | Wed 1/10/18 | Tue 10/30/18 |               |
| 586 | 🔧 | Cable tendering  | 15 days   | Wed 1/10/18 | Tue 1/30/18  | 580FS+30 days |
| 587 | 🔧 | Drawings   | 10 days   | Wed 1/31/18 | Tue 2/13/18  | 586           |
| 588 | 🔧 | Material for Prototypes shipped                          | 0 days    | Tue 2/13/18 | Tue 2/13/18  | 587           |
| 589 | 🔧 | Prototype production                                     | 8 wks     | Wed 2/14/18 | Tue 4/10/18  | 587           |
| 590 | 🔧 | Prototype Approval                                       | 3 wks     | Wed 4/11/18 | Tue 5/1/18   | 589           |
| 591 | 🔧 | Production Batch 1                                       | 12 wks    | Wed 5/2/18  | Tue 7/24/18  | 590           |
| 592 | 🔧 | Approval Batch 1   | 2 wks     | Wed 7/25/18 | Tue 8/7/18   | 591           |
| 593 | 🔧 | Production Batch 2                                       | 24 days   | Wed 8/8/18  | Mon 9/10/18  | 592           |
| 594 | 🔧 | Production Batch 3                                       | 16 days   | Tue 9/11/18 | Tue 10/2/18  | 593           |
| 595 | 🔧 | Production Batch 4                                       | 20 days   | Wed 10/3/18 | Tue 10/30/18 | 594           |
| 596 | 🔧 |  |           |             |              |               |



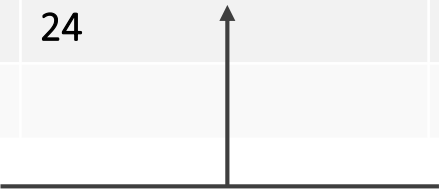
# Planning – Readout Unit material/board procurement/production

## Components procurement

| Component             | Due to        | Status                     |
|-----------------------|---------------|----------------------------|
| GBT components        | Jun-Sept 2018 | Booked                     |
| ICs (FPGAs, memories) | Jun 2018      | Ordering procedure ongoing |
| Fiberoptics           | Aug 2018      | Ordering procedure ongoing |
| Crates                | Jun-Nov 2019  | Prototype ready            |

## Boards production (and testing)

| Commissioning | Due to   | Readout Unit<br>[cumulative] | Power Board<br>[cumulative] | CRUs / FLP<br>[cumulative] | Data cables<br>[cumulative] |
|---------------|----------|------------------------------|-----------------------------|----------------------------|-----------------------------|
| Layer 0       | Jul 2018 | 12 [12]                      | 6 [6]                       | 2 [2]                      | 12 [12]                     |
| Layer 1, 2    | Sep 2018 | 16, 20 [48]                  | 8, 10 [24]                  | 4 [6]                      | 16, 20 [48]                 |
| Layers 3, 4   | Nov 2018 | 24, 30 [102]                 | 12, 15 [51]                 | 6 [12]                     | 96, 120 [264]               |
| Layers 5, 6   | Jan 2019 | 42, 48 [192]                 | 42, 48 [141]                | 12 [24]                    | 168, 192 [624]              |
| Total         |          | 192                          | 141                         | 24                         | 624                         |
| Spares + R&D  |          | 28                           | 59                          |                            | 26                          |



Actual CRU number can be reduced  
by a factor 3 for commissioning