



M. Vretenar, CERN, Project Coordinator

05 December 2022

# Agenda for this Meeting

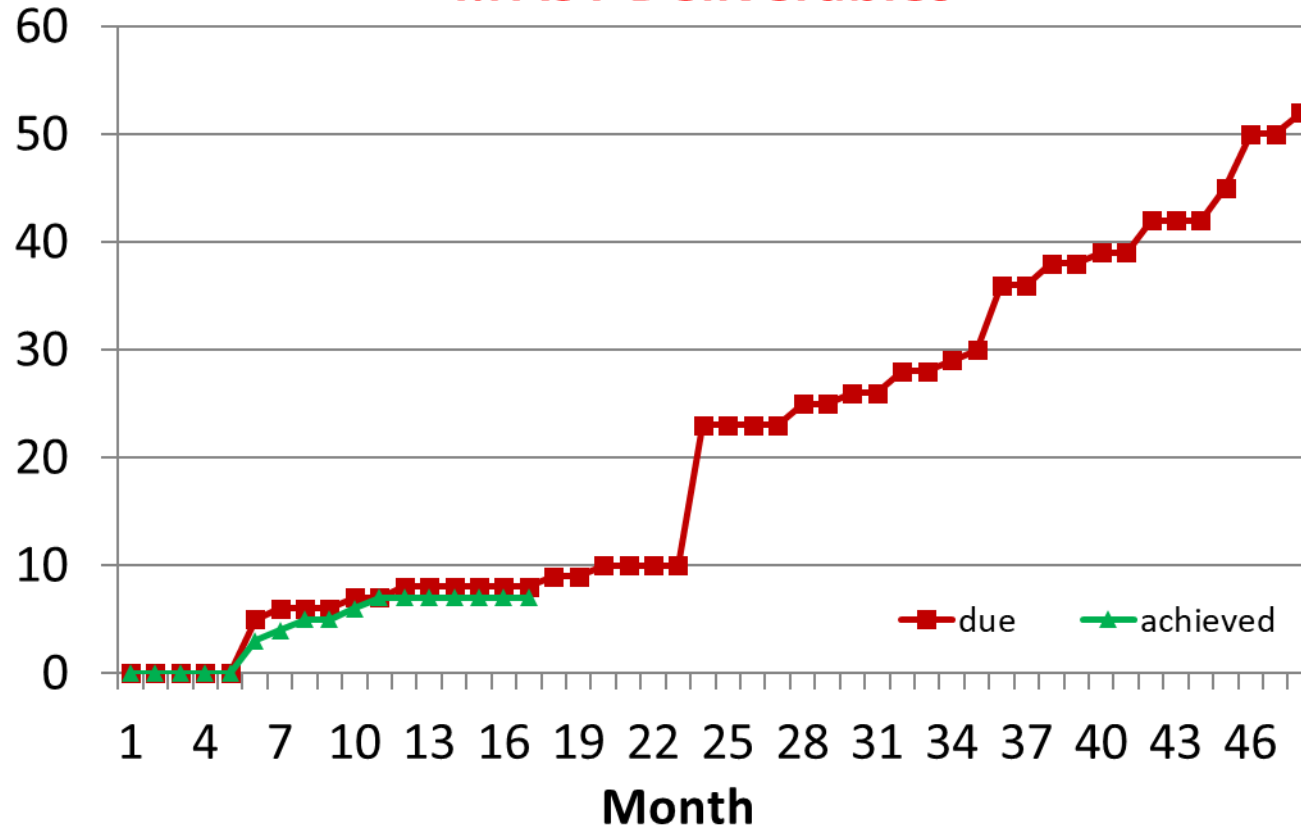
- ❑ Status of the Project, Deliverables and Milestones
- ❑ Status of Periodic Report 1 (technical part)
- ❑ Period 1 Review: date, agenda, reviewer
- ❑ I.FAST achievements and open issues for the Review
- ❑ Outcome of the I.FAST Innovation Fund (M. Losasso)
- ❑ 2023 Annual Meeting in Trieste (V. Brunner)
- ❑ Periodic Report 1 (financial part) (C. Levointurier-Vajda)
- ❑ “Tour de table” on open questions and issues

# General points

- End of 2022 we will be at M20, **42% of project** !
- Accordingly to REA practice, there will be no Mid-Term Review, but an **online review after delivery of PR1, on 7 February 2023**.
- Worrying news from some **industry partners**, on delays and over costs related to the general material and component crisis, and to rising inflation. Two companies are withdrawing from WP8, a major issue that we hope will not open the way to other withdrawals.
- Some initial success (CBI in WP2, RFQ prototype in WP10, I.FAST Fund in WP4, ...) and some critical issues (industry training scheme not very successful, industry partners to replace, many delays).
- Need follow-up!

# Status of Deliverables

## I.FAST Deliverables

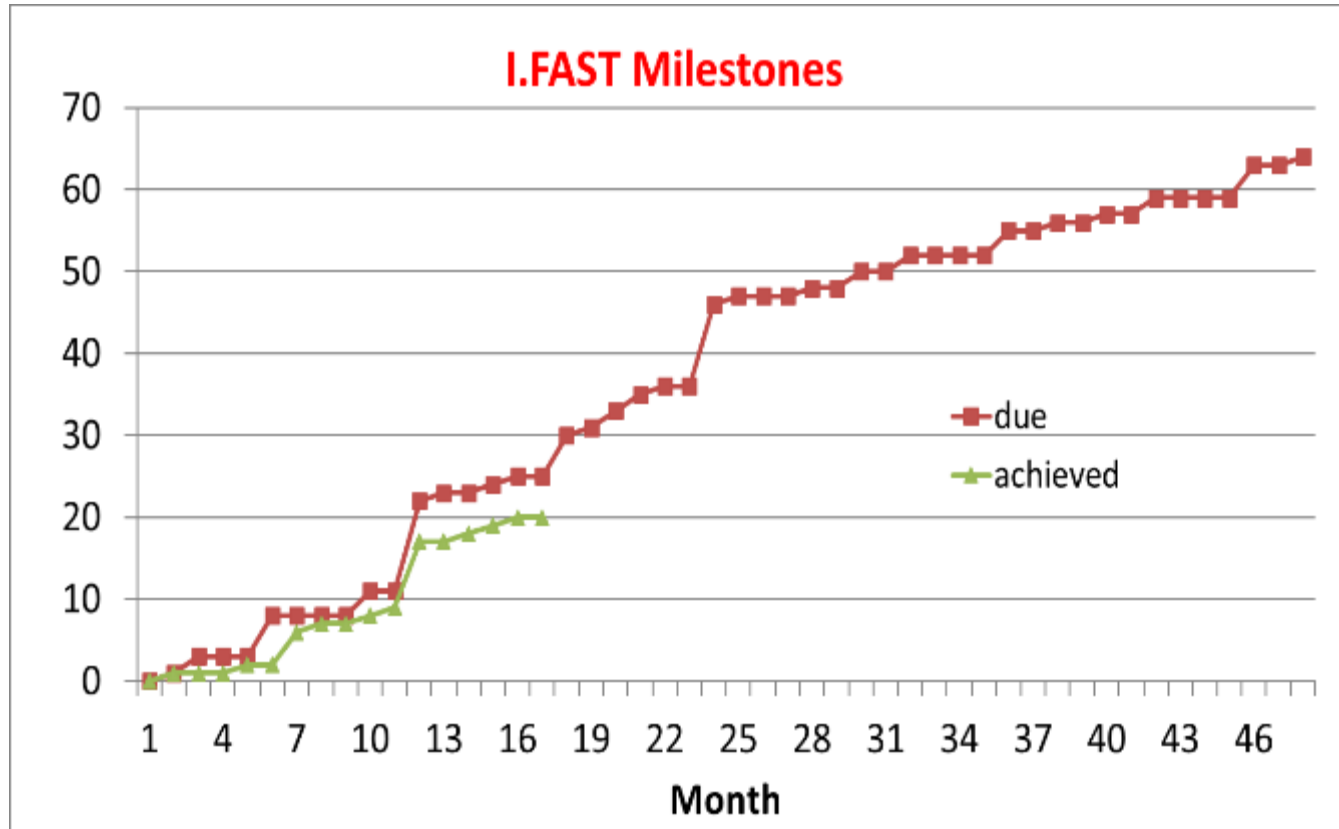


- 2 Deliverables

D10.3 Additive-manufactured SRF cavities: from M12 to M20 (late delivery of SC powders) has been promised for 9 December (must go into Periodic Report!)

D8.3 First Engineering design of HTS demonstrator: from M18 to M24 (shift of activities from CEA to INFN because of missing personnel)

# Status of Milestones



- 2 Milestones due in Period 1 need to be submitted in December:

MS15 International workshop on muon source design

MS13 First characterisation of beam windows materials under thermomechanical load and extended radiation damage

- 4 other Milestones are late and have asked for a delay:

MS46 Performance of Superconductive Cavities made by AM technology by Nb or Cu with Nb thin spattered film on the internal surface 10.4 M12 30/04/22 to M30

MS5 ACO workshop 2.2 M18 31/10/22 M24

MS53 Workshop on sustainable materials and lifecycle management for accelerators 11.1 M18 31/10/22 M22

MS60 First Plasma achieved on the prototype. 12.3 M19 30/11/22 M22

# Periodic report 1

- Covers the first **18 months** (May 2021 – October 2022)
- Must be submitted 2 months after end of period (**December 2022**)
- Assembled starting from the Year 1 report prepared this summer
- All Task Leaders have been asked to update their part.
- Many thanks for your excellent contributions, **all have eventually replied** (except one...).
- The draft Report of **141 pages** edited by the Coordinator has been sent this morning to **WP Coordinators and Steering Committee members for comments and approval**.
- It will be sent on 12 December to all Task Leaders for final check until **20 December**.
- Unfortunately, it can't be uploaded on the EC Portal until all Financial Reports are uploaded by the partners. Some will come only between X-mas and New Year and others only in early January. The goal is to **finalise submission before 15 January**.

# Period 1 Review

- The REA Agency asks for a one-day online review after each reporting period (bad news) instead than at mid-term (good news).
- The I.FAST Review will take place on Tuesday 7 February from 9:00 to 16:00 (CET). Please reserve some time to present your WP/Task. Standard presentation is 10 minutes (+5' questions).
- The Reviewer will be Professor Mehmet Zeyrek, a high-energy physicist who works at CERN and FNAL. Any objection to this name (conflict of interest or other)?

# Agenda of Period 1 Review

7 February 2023

- 9:00 Introduction (A. Ventura)
  - 9:10 Introduction to I.FAST : goals and structure (M. Vretenar)
  - 9:25 Main achievements and open issues during P1 (M. Vretenar)
  - 9:40 report on WP1 & WP13 (M. Vretenar)
  - 9:50 discussion
  - 10:00 WP2 (P. Burrows)
  - 10:15 WP3 (M. Morandin)
  - 10:30 coffee break
  - 11:00 WP4 and Innovation Fund (M. Losasso)
  - 11:20 Task 5.1 (N. Pastrone)
  - 11:30 Tasks 5.2 and 5.3 (F. Zimmermann)
  - 11:40 WP6 introduction (R. Assmann)
  - 11:50 Tasks 6.3 and 6.4 (C. Thauray)
  - 12:00 WP7 introduction (R. Bartolini)
  - 12:05 Task 7.3 (Y. Papaphilippou)
  - 12:15 Task 7.4 and 7.5 (D. Alesini)
  - 12:30 lunch break
  - 14:00 WP8 (E. De Matteis)
  - 14:15 Task 8.6
  - 14:25 WP9+Task 10.5 (O. Malyshev or C. Antoine)
  - 14:40 WP10 (T. Torims)
  - 14:55 WP11 (M. Seidel and O. Brunner or B. Shepherd)
  - 15:10 WP12 (R. Edgecock)
  - 15:25 WP13 (S. Leray)
  - 15:40 Discussion and concluding remarks
  - 16:00 end of meeting
1. Once we send out the agenda, don't hesitate to ask moving your talk if it falls in a slot where you are not available.
  2. If you are unable to present, you should find a replacement (from your lab or from your WP). If there is no replacements, speakers have to prepare few slides that I will present.
  3. Can you help to sort out who will speak for Task 6.1/6.2 and for WP11?

Presentation time:

10' (+5' questions),  
or  
5' (+5' questions)



# Main achievements of P1

In my introductory talk at the Review, I want to present the main achievements (highlights) of P1. In my view, these are:

- The CBI Challenge on Environment (article on CERN Bulletin and CORDIS), for the idea, the organisation, the number of participants and the quality of the results.
- The I.FAST Innovation Fund, for the number and quality of the proposals, the fairness and good organisation of the selection process, and the quality of the 8 selected projects.
- The Additively-Manufactured RFQ prototype of WP10 (article in CERN Bulletin and press releases), for the innovative content, the academia-industry collaboration, and for attracting a new partner investing internal resources.
- Anything else that you would like to add to this list?

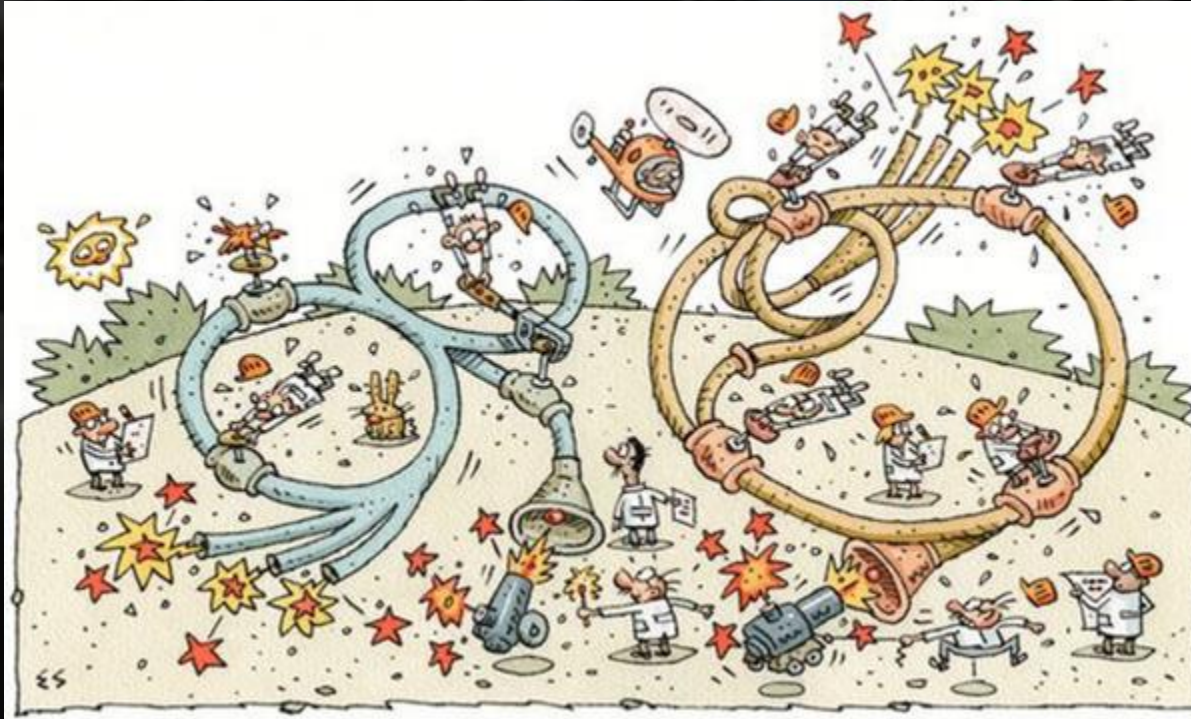
# Main issues of P1

In a similar way, I want to present the main issues encountered during P1 and our actions. In my view, these are:

- The **change in the Deliverables** of Tasks 8.2 and 8.3, from “Conceptual Design and Construction of curved CCT” to “Conceptual Design and Construction of combined function CCT”, for the interest in the combined-function option and for the fact that a curved demonstrator will be produced in the HITRIplus project.
- The persistent difficulty to find candidates for the **Industry Training Programme** – only 2 so far, out of 10 possible slots. The reasons were analysed, the call was widely advertised. Solutions are to keep the call open until the end of I.FAST, and possibly accept as well exchanges in the other direction, from academia to industry.
- The general **increase in energy, raw materials and equipment costs** and the delays in delivery are slowing down progress in many WP’s and are leading to budget issues in particular with industrial partners that don’t have flexibility in providing internal resources. Will be followed closely, and might lead to some descopeing of activities.
- In this context, the **withdrawal in WP8 of two industrial partners** (BNG and Scanditronix) because it turned out that in the new environment they don’t have the resources to provide the agreed contribution. We plan to keep them as Beneficiaries at zero contribution and are trying to move their work to other Beneficiaries. Elytt has already agreed to take care of a part, and Wigner is considering taking the rest.
- Usual **personnel problems** in some WP’s (delays related to recruitment problems and to loss of key personnel).
- Any other critical issue worth reporting?

# iFAST

# THANK YOU FOR YOUR ATTENTION!



*Image credit: Elwood  
H. Smith, The New  
York Times*



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