



27-06-2022

MOU PARTNER EMR REGION

Stan Bentvelsen

EINSTEIN TELESCOPE IN EMR REGION

Einstein Telescope in the EMR region

- Many institutions signed the MoU
- A lot of (international) ET activities

Can we further team-up in the preparation of the EMR site?

- This meeting is to re-new the discussion with the scientific delegates of the MoU partners



MOU PARTNERS

12 partners signed in 2018, more partners appeared afterwards:

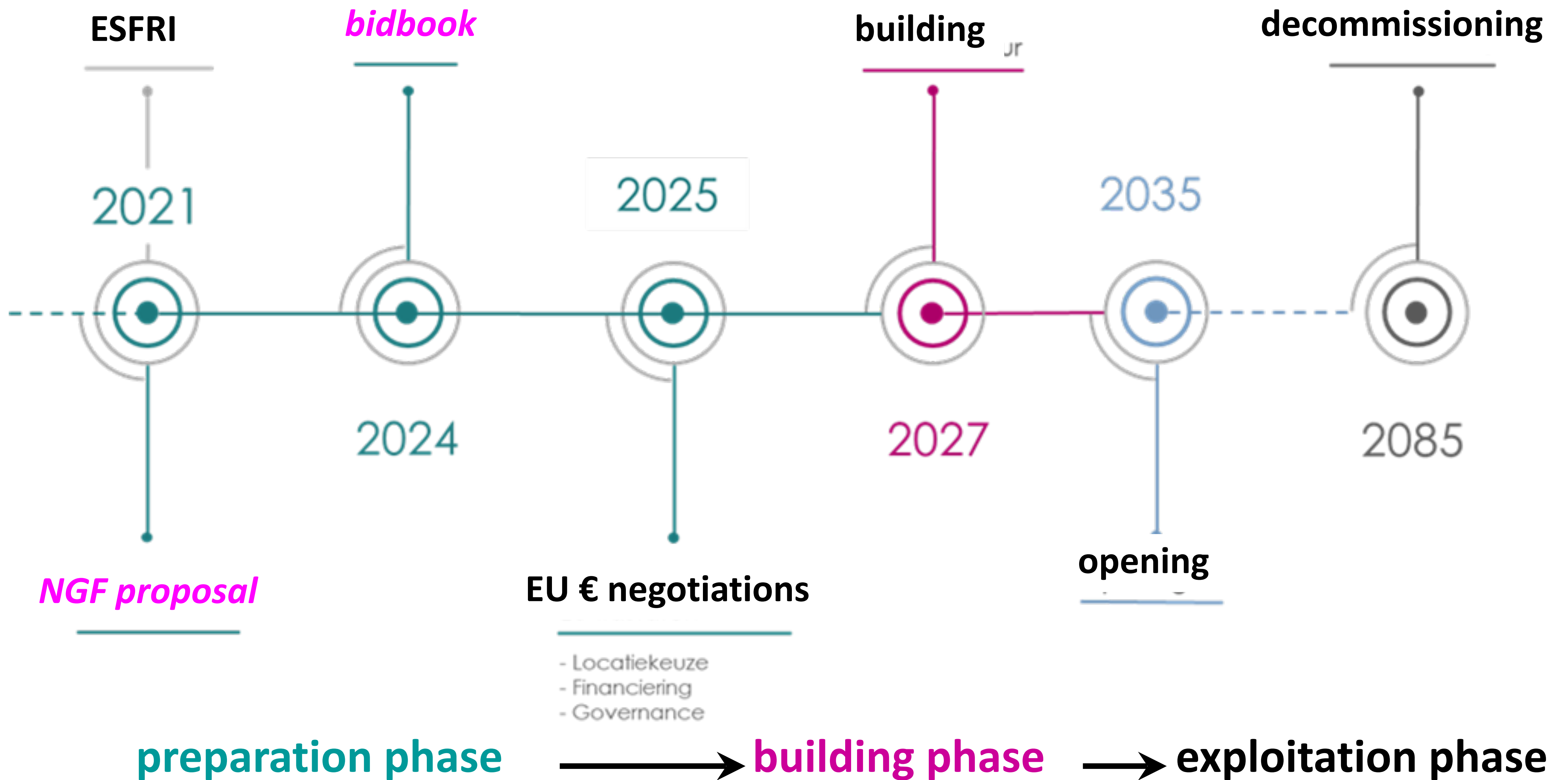
- Nikhef
- KU Leuven
- Universiteit Maastricht
- Universiteit Gent
- Universiteit Hasselt
- RWTH Aachen
- UC Louvain
- Vrije Universiteit Brussel
- Universiteit Antwerpen
- Université de Liège
- Université Libre de Bruxelles
- Universität Hamburg
- Université de Mons
- Westfälische Wilhelms-Universität Münster (WWU Münster)
- Leibniz Universität Hannover (LUH)
- Max-Planck Institut für Gravitationsphysik (MPG) – Albert Einstein Institute (AEI)
- Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)
- Fraunhofer Institute for Laser Technology ILT
- Université de Namur
- Radboud Universiteit Nijmegen

Memorandum of Understanding (MoU) Agreement

on the cooperation on research and development and preparatory actions toward a case for a bid for hosting Einstein Telescope in EU region Meuse-Rhine, hereafter also referred to as “Cooperation Agreement”

We need to check this list of partners of the EMR region. Everybody is welcome to join!
Contact person: Rob van der Meer (r.van.der.meer@nikhef.nl)

Einstein Telescope planning



A BID OF THE EMR REGION

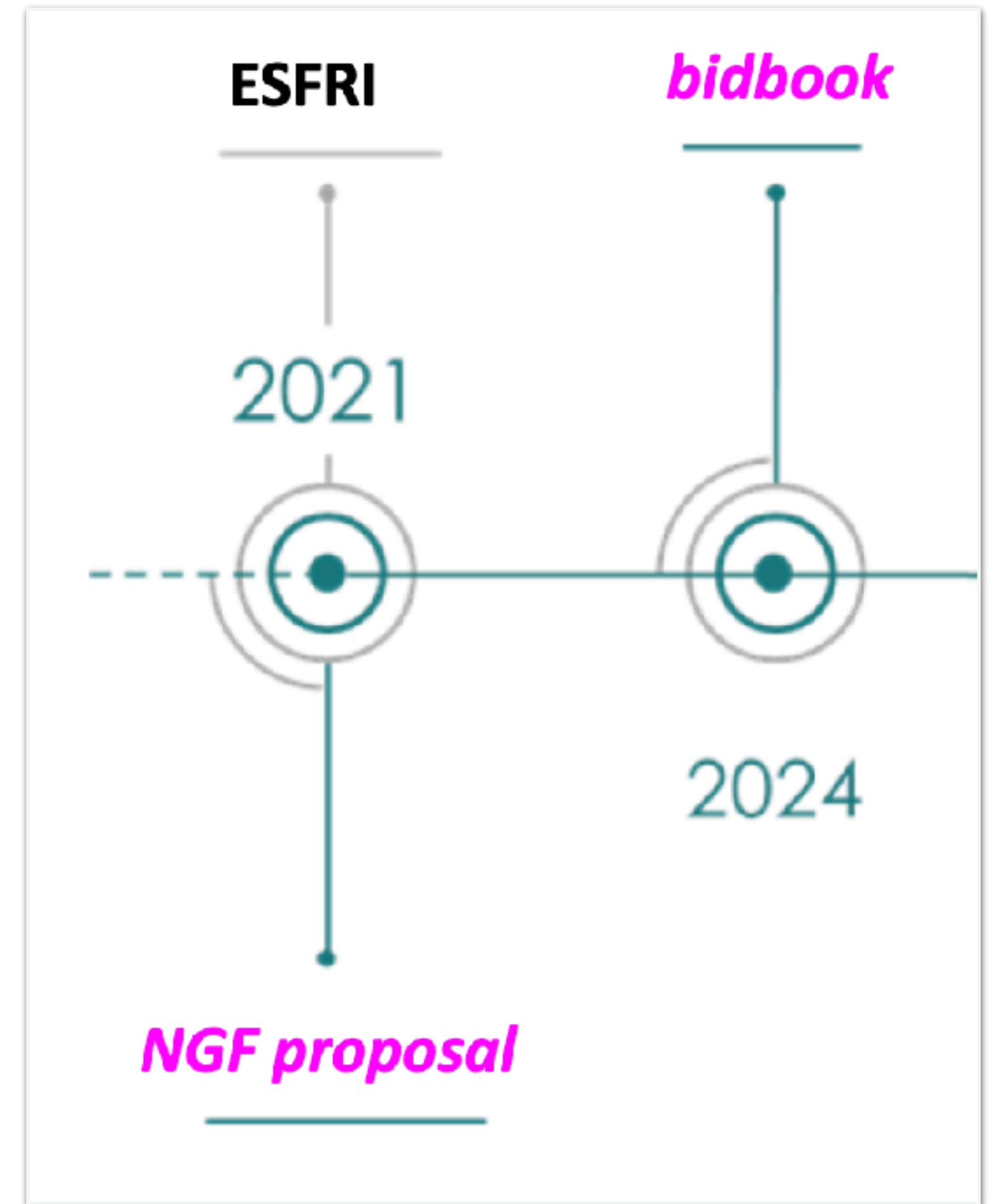
We have to show the EMR region wants it

- Maximum support from B,G,NL
 - Further lobby at scientist level
 - Explore all contacts with decision-makers
- Funding from EMR countries

The geology of the EMR site is crucial

- Determine exact location of the infrastructure
 - De-risk any potential show-stoppers
- Mitigate any noise sources

The exact content of the bid is not yet clear



ET IN EUREGIO MEUSE-RHINE (EMR)

Dutch National Growth Fund for ET

- **42 ME** (conditionally) awarded now
 - Money flows from 2023
- **19 ME:** connections to industry for research and innovation: 'the aim of this programme is to optimally position [...] in particular Dutch industry, for R&D and orders related to Einstein Telescope'
- **23 ME:** 'for the preparation toward the realisation of the underground infrastructure [...]', project organisation and management
- **870 ME** have been reserved for the construction of the ET infrastructure
 - If the EMR site is selected as the location for ET



ET IN EUREGIO MEUSE-RHINE (EMR)

Geology activities

- A series of workshops in the preparation of the bidbook to determine the exact location of the infrastructure
 - Further (seismic) surveys and boreholes for geophysical imaging
 - Partners from Belgium, Germany, the Netherlands
 - E-TEST, RWTH, Liege, KNMI, TNO, Technical Universities, ...
- Converge to a realistic and effective activity plan that supports the sense of urgency

Surrounding activities

- Permits for wind turbines and other noise sources
 - Including the study of their effect on the ET

EINSTEIN TELESCOPE IN EMR REGION

Proposed discussion
after the presentations

Team-up during the crucial coming two to three years

- Regular informative (short) meetings with all MoU partners
 - Status updates and alignment

Organise help to validate the EMR region

- Noise studies, environmental issues, geology, etc
 - We need manpower! Think of PhD or PostDocs etc

Lobby toward decision makers

- Organise a meeting with your institute managers, directors, etc
 - Can we get them together in the EMR region for half a day on bid-book?

Position ourselves in the international ET collaboration

- Position the EMR region as truly valid ET location

Agenda for this afternoon

14:00 → 14:15 **Introduction**
Speaker: Stan Bentvelsen

14:15 → 14:30 **Status of ET for EMR**
Speaker: Harald Luck

14:30 → 14:45 **Status of Germany**
Speaker: Achim Stahl

14:45 → 15:00 **Status of Belgium / Flanders**
Speaker: Nick van Remortel

15:00 → 15:15 **Status of Belgium / Wallonia**
Speaker: Giacomo Bruno

15:15 → 15:30 **Status of the Netherlands**
Speaker: Stefan Hild

15:30 → 16:00 **Discussion**